ABSENCE FROM WORK

A thesis submitted in partial fulfilment

of the requirements for the degree

of

Master of Arts in Psychology

in the

University of Canterbury

by

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University of Canterbury

1977

ACKNOWLEDGEMENTS

The author wishes to thank Mr B.D. Jamieson for his supervision of this thesis. Thanks are also due to Dr Priest, Bob Dickinson, Steve McLeod, Margaret Robbie and Don McLean for their assistance. A special note of thanks is due to all those employees of both firms who volunteered to be interviewed. Finally I wish to thank Sharon and Helen for their help in the preparation of the final draft of this thesis.

ABSTRACT

The absence behaviours of eighty blue-collar males engaged in the manufacturing industry were investigated by examining the manner in which they were related to a range of person, work and contextual variables. Each employee completed a job satisfaction questionnaire and was then interviewed about various aspects of his absence behaviour and related subjects. The results of the investigation highlighted the multi-dimensional nature of absence and showed that absence cannot be explained by simple causal relationships. The importance of contextual variables, in particular those which could be labelled social, was highlighted. The report closed with a discussion of the implications of the findings.

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CHAPTER 1

INTRODUCTION

Apart from the routine determination of absenteeism rates there has been very little research concerning the extent of absence from work in New Zealand or for that matter the factors which contribute to it. Probably the earliest formal study in this country was conducted by Hearnshaw, Winterbourn and Churton (1943) under the auspices of the Applied Psychology unit of the D.S.I.R. Until recently, with the exception of a number of small reports (e.g. Ellis 1973) there had been very little further research conducted. In 1975 the Research and Planning Division of the Labour Department undertook a national survey covering a two week period, the aim of which was to obtain some basic data on absence rates. This survey showed that the mean absence rate in over 1000 firms employing 70,900 employees was 5.9% (Labour Department New Zealand 1975).

The lack of attention the subject has received both in research and the popular press in New Zealand is surprising when one compares it with that devoted to industrial stoppages. If one assumes that there is an absence rate of approximately 5% (i.e. a conservative estimate), this results in a loss of twelve man-days per employee per annum assuming that each employee can be available for work 241 days a year. For every thousand workers this means a loss of 12,000 man days per annum. This may be compared with the New Zealand annual average of 215 man-days lost per thousand workers in industrial stoppages, over the period 1970-1974 (N.Z. Year

Book 1975). Direct labour costs however, form only a fraction of the true loss caused by reduced manpower and it is only when consideration is given to such things as; idle equipment, increased overtime, increased manning requirements to offset expected absence, disrupted production schedules and lost orders etc., that an appreciation if not an accurate estimate of the probable costs of the problem can be obtained. In view of this the author believes that the subject of absence from work deserves more attention than it receives at present. This thesis is an attempt to examine the nature of some aspects of absence in a New Zealand setting.

The following chapter deals with definitions and classifications of absence, absence measurement, the empirical studies from overseas and a discussion of absenteeism theory. This is followed by a presentation of the rationale for and aims of the investigation, together with details of the methods adopted. The results, which are presented in chapter four, are discussed in chapter five together with methodological problems with this study. Conclusions and implications are the subjects of the final chapter. The report concludes with a reference list and appendices.

CHAPTER 2

LITERATURE

This chapter deals with problems relating to the definition and classification of absence followed by a discussion of the various ways absence can be measured. Empirical studies are then reviewed and finally there is a review of the theories which have attempted to explain absence behaviour.

2.1 DEFINITIONS AND CLASSIFICATIONS OF ABSENCE

The understanding of absence behaviour has been seriously hampered by an inconsistency of definitions. Even the words "absence" and "absenteeism" have no standard meanings in industry. Both terms are often used loosely to refer to the same business ailment. In many minds however, absenteeism is associated with unnecessary or unavoidable absence. Complicating matters further is the large number of sub-categories of absence. This was highlighted by Gaudet's (1963) review for the American Management Association. He listed sixty-three defined categories of absence. This situation has arisen for a variety of reasons.

Although the main aim of those organisations measuring absence has been to identify avoidable and unavoidable absences, (presumably with a view to prevention) most of them have found it desirable, for a variety of different reasons, to adopt further sub-categories. For instance, an organisation running a twenty-four hour operation may place emphasis on

prior notification of intended absence so that they can re-organise manning schedules and the like. Thus they have categories such as "advised" and "not advised". Alternatively an organisation may not be concerned with measuring voluntary and involuntary absence; its sole concern may be with those absences which were paid for. Thus it adopts an "absence paid", "absence unpaid" categorisation.

In most research into absence the aim has been to measure voluntary absence which might reflect the effects of variables under investigation. This approach, that is focusing solely upon voluntary absences, is obviously impractical in some of those organisations which are not concerned with unavoidable and avoidable absences. Indeed it appears that it may not be a very practical course to pursue even in those situations which allow the researcher to measure voluntary absence. Argyle, Gardiner and Cioffi (1958), Behrend (1959), Jones (1970) and Ingham (1970) have all argued that no meaningful distinctions can be made between voluntary and unavoidable absence because no discriminating criteria can be applied, a view which the author subscribes to. As an illustration consider the recording of sickness absence.

In most organisations doctors' certificates are not required for one-day sickness absences. Many employers are well aware that in these situations many employees resort to explaining their absence by saying they were sick when in fact they were not. It seems likely that in most organisations that record absence, this type of absence would ultimately be classified as involuntary, assuming of course that there was

no evidence either way. This being the case the investigator who attempts to measure voluntary absence in such an organization is dealing with incomplete data.

The situation is much the same when one considers longer term absences which require certification. Ferguson (1972), made the point that sickness absence is usually the result of several factors only one or more of which may be medical and that it bears little relationship to the actual state of health of an employee. Complicating the matter even further is the fact that sickness is an imprecise concept. There are degrees of sickness, and it is hard even for a medical practitioner to say, in the case of persons who are fatigued and run down, whether or not they are "sick". There is room for a wide variation of opinion, as some employees are well aware.

> "Sick leave was openly manipulated by some telegraphists, who were known to have a panel of medical practitioners to whom they could turn for a "certificate"." Ferguson (1972 p.429).

Even if one ignores the question of confidentiality it is little wonder that some doctors' certificates simply state that the employee attended surgery on a particular day. Finally one wonders just how sick some people who are absent actually are when there are, for example, instances of chronic asthmatics who haven't missed a day of work in twenty-three years! (Taylor 1968). Further problems arise when one considers that the classification of a sickness absence can depend on the whim of the supervisor. Comparative studies, in particular, are thwarted by differences in the stringency with which regulations on sickness absence are enforced and detail with which records are kept.

These problems are not peculiar to sickness absence alone. In general they are common to most classifications of absence. This being the case it seems that a classification of absences according to whether they were voluntary or involuntary, or in terms of any similar criteria for that matter, is of doubtful value to the researcher. A much more realistic approach appears to be to consider all types of absence as withdrawal behaviours. The diversity of the types of absence studies referred to in some papers and reviews as support for particular views implies that there are many authors that accept such an interpretation of absence behaviours, but have not stated it explicitly. Moreover, a number of authors have actually examined the relationships among various types of absence behaviours and have found positive relationships. For example, Taylor (1968) found positive correlations between sickness spells and lateness and also with absence without permission. Hill and Trist (1953) found accidents and other forms of absence are all interrelated.

The following literature review accepts the viewpoint that in general all types of absence can be considered as withdrawal behaviours and as such can be discussed together.

2.2 ABSENCE MEASUREMENT

The most common method of expressing absence rates is the Percentage Time Lost Index. This represents absence levels as the percentage of lost time for whatever reason (excluding holidays) of the possible working time. A second measure is the Frequency Index which is a count of the number of occasions of absence per man over a specified period. Two other relatively uncommon measures are the Blue Monday Index, which is simply the difference between Monday's and Friday's absence figures and the Worst Day Index which is a variation of the former, measuring the differential between the two days of the week which have the best and worst records of absence.

Huse and Taylor (1962) and Chadwick-Jones, Brown and Nicholson (1971) pointed out the various advantages and disadvantages of these measures and reviewed the research which had attempted to assess the reliability and validity of each of them. In both cases the overall conclusion was that the Frequency Index is the best measure. However, it does seem to be the case that there will be situations in which the Time Lost Index would be preferable, e.g. in examining what percentage of the time those individuals with dependents are absent as opposed to those without. This being the case it seems that where possible both the Time Lost Index and the Frequency Index should be used.

2.3 EMPIRICAL STUDIES

In contrast to the New Zealand scene, overseas the subject of absence from work has received a great deal of attention. Behrend (1959) prepared the first comprehensive review. Since that date there has been only one other major review, that of Chadwick-Jones, Brown and Nicholson (1973). However, it is the author's opinion that there are a sufficient number of studies which have not been considered in these reviews to warrant a further review. Furthermore the reviews have made only a passing mention of factors such as; Journey to Work, Attendance Schemes, Daily Variations, and Cultural Factors.

With few exceptions only those studies providing empirical data are reviewed. Articles based wholly or mostly on the opinions of the respective authors unsupported by data have been excluded. In addition, articles based on casual observations where it seems unlikely that the procedures could be easily repeated by other researchers have also been excluded.

The studies cited examine the relationships of a number of variables to absence. For convenience they are ordered under the headings of person, work and contextual variables. A number of studies have examined in particular the relationship between job satisfaction and absence. Because these studies are not easily categorised they will be discussed separately.

Footnote: The review has been conducted within the restraints of the interloan system and as such deals mainly with the British studies. However, the author does appreciate that a considerable amount of research has been conducted in other countries, in particular the Netherlands, but in the majority of cases problems of translation and access have made the inclusion of most of this work impossible.

2.3.1 Person Variables

(a) Age

The relationship between employee age and absence has been given more attention than that of any other single variable. The findings of Denerly (1952), Buzzard and Shaw (1952), Isambert-Jamati (1962), Cornwall and Raffles (1961), Collins (1962) and Simpson (1962) all indicated decreasing frequencies of absences but increasing duration of absence spells with age for both sexes. On the other hand the studies of Schenet (1945), involving 850 males and females, Naylor and Vincent (1959), involving 2020 females, and Gadourek (1965) involving 2209 males all failed to show any significant relationships between age and absence.

Shepherd and Walker (1956) found a curvilinear relationship between percentage time lost and age, the middle age range employees having the best attendance records. They pointed out that a number of factors could be confounding the relationship not the least of which was the type of work. Several of the older workers in this particular study were involved in arduous physical work. Baumgartel and Sobol (1959) also suggested that extraneous factors may be influencing the relationship. They found, for instance, that blue collar workers averaged 9.98 days of absence per year whilst white collar workers averaged 6.23, a difference which, they claimed, was significant, although no significance testing was reported.

All the studies mentioned so far have been based on comparisons of absence records of cross-sections of people in different age groups during a particular period. This cross-sectional method is quite often the only practical approach,

although it does have its weaknesses as de la Mare and Sergean (1961) pointed out.

> "... groups of people with the same birth date may have characteristics in common other than age, arising for example, from their having grown up and started work in similar social and economic conditions. The cross-sectional method does not eliminate the possibility that any differences of absence rates between groups may be due to such unidentified common characteristics." (P245)

In order to investigate the possibility of such effects de la Mare and Sergean (1961) used both the cross-sectional and longitudinal methods in their analysis of the absence behaviour of 140 workers employed by an engineering firm. The cross-sectional analysis showed that there was a decrease in the frequency of absences with increases in age but an increase in the duration of the spells, a finding which supports the results of other investigations using a cross-sectional method which have already been referred to above. While the longitudinal method showed an increase in the duration of the spells with age it failed to show any decrease in the incidence of absence with age. De la Mare and Sergean suggested that the results indicate a difference in values or attitudes to work among the groups, arising from their different social and economic experiences. Gadourek (1965) made a similar suggestion by pointing out that different age groups behave according to the expectations society has for their particular age group.

> "In certain cultural and social settings, collective ideas may prevail of what should be the conduct of the twenty-year old as compared with those in their forties,

> and those in their fifties or sixties. Each of these groups may have a collective image of its health and energy resources; to a certain degree irrespective of what these resources, in fact, may be." (P 16)

In a longitudinal study involving three firms and 392 employees Cooper and Payne (1965) failed to find any indication that the frequency of absence decreased with age. In fact, in two of the firms studied there were "emphatic increases in absence frequency with age" (P34). As they point out these findings naturally lead one to question the cross-sectional method but equally so the longitudinal approach. They close their article by suggesting that further advances in the study of the age-absence relationship are dependent upon the recognition of what they term "ecological variables".

Froggatt (1970a), adopting exactly the same approach as de la Mare and Sergean (1961), using both cross-sectional and longitudinal methods, but measuring only unapproved absences of 2,300 males and females, failed to find any significant results with either method.

Thus the influence age has on absence is not clear. The evidence above suggests that where age differences are found they can be attributed to many possible factors, most of which could be labelled social. Moreover the studies comparing cross-sectional and longitudinal methodologies emphasize the dangers involved in extrapolating and making generalizations from cross-sectional data. Finally any consideration of age should bear in mind the maturity aspects of age.

(b) Length of Service

On apriori grounds one would expect an association between length of service and age, and indeed many of the studies reported below consider this. Both the cross-sectional and longitudinal methods have been used in the investigations described below.

Cross-sectional Studies: In a study involving 3,900 non-supervisory employees Baumgartel and Sobol (1959) employed the partial correlation technique to investigate relationships among; sex, kind of work, age and wage level and absence, and showed that longer serving personnel were significantly ($p < 0.01$) more absent than those with shorter length of service.

Martin (1971) examined the uncertified and certified absence rates over a two year period for 20 pairs of males and 16 pairs of females employed by a light engineering company. The pairs were matched for age, overtime and travel distance. She found that those males who had been with the company the longest had significantly more of both types of absence ($P < 0.01$). No such relationship was found for females. Martin suggests that this result could be attributable to the fact that the company's sickness benefits increase after seven years' service. However, no indications were given of how many employees would qualify for these increased benefits.

The Australian Public Service Board carried out a survey of sickness absence over one year among a sample of 11,899 males and females of the Australian Public Service Staff. Miller (1974) in a review of some of these findings indicated that

> "... there was no discernable trend whereby absence rates increased or decreased according to length of service" (P336)

a finding which is in agreement with that of Gadourek (1965).

The most elaborate cross-sectional research was that of Froggatt (1970a) who was specifically concerned with short-term absence (1-2 days) in industry. His observations were based on 2,300 male and female personnel, both salaried and hourly-paid, over periods of up to seven years. Twenty groups were identified for the analysis, each comprising members of similar 'works centre', sex, supervisory grade, and marital status, and who hadn't changed relevant status over the study period. None of the employees were absent more than 65 days in any year. Multiple regression analysis for the effect of age and length service showed that length of service had no effect and age was only weakly associated with short-term absences. Included in this study was a small longitudinal study of one group of females (n = 27) and one group of males (n = 71) all of whom had been employed for seven consecutive years. Over this period the mean annual number of one-day absences decreased in both groups while the two-day absences showed no strong trend.

Longitudinal Studies: Hill and Trist (1955) studied men who joined a factory in one particular year and who stayed for the next four calendar years and observed the frequency of absence in the eight six-monthly periods contained in these four years. They found that total absences rose between the first and second half-yearly periods but then fell progressively through to the fifth half-yearly period and levelled out for the three

remaining periods. Subsequent analysis showed that over the course of employment unsanctioned forms of absence declined while sanctioned forms rose. They suggested that this was indicative of the improved relationship between the firm and employee but they failed to consider the effects of increases in sick pay or other benefits provided for long-service employees, even though they had shown that the increase was attributable to sickness absence.

Cooper and Payne (1965) undertook a longitudinal investigation in three Meryside factories. They followed employees' sickness absences over periods of 15 years in two firms and in a third the period was 33 years. The results showed that in two firms "there was an emphatic" increase in absence frequency with age. The relevance of this study is somewhat limited as it seems highly likely that such a group of stayers is anything but representative of employees.

Pocock (1973) used both longitudinal and cross-sectional methods in his study of male manual workers. The longitudinal analysis covering the first five years of employment of 454 men showed that sickness absence rates in the first six months of service were less than half the rates during the next four and a half years, a difference which proved significant ($P < .01$). The overall level of sickness absence after the first six months remained "remarkably constant" (P66), indicating that once the first six months is over sickness absence is not related to length of service, in the first five years. The cross-sectional study considered the 1964 sickness absence for 1,263 men all of whom were eligible for sick pay for all this period. The analysis showed that men with long service, that is, over ten years' service ($n = 585$), were less frequently

absent than the rest ($P < .05$), whereas days lost was not associated with length of service. Pocock suggested that these results were attributable to the characteristics of the long-service employee.

> "He is a 'survivor' who has elected to stay in the same company and thus indicates some degree of job satisfaction. He is also more likely to achieve higher status (e.g. charge-hand) than the more recently employed and is therefore liable to have a greater degree of responsibility. All these factors are associated with lower absence rates" (P69).

The studies above have shown that effects of length of service on absence behaviour are not simple. Where relationships have been established they have been explained by reference not to length of service per se but to factors which are concomitant with it. Particularly significant are the effects of sick pay schemes and age. Furthermore there are even more subtle forces operating apart from those already discussed. Particularly relevant to this type of study are the organisation's regulations relating to absence. In most organisations consistently poor attendancy by an employee results in the termination of employment by the company. This being the case the longer serving employee generally must have a better attendance record by definition. Another point worthy of consideration is the degree of favouritism which may be operating. It is not difficult to imagine the situation where the long serving employees are shown more leniency in respect to their absences. They may have proven themselves to be good workers and as such are valued by the organisation.

Alternatively the supervisor knows them well and some of their problems and thus makes allowances. Finally, longer serving employees probably include amongst their ranks the majority of the older workers. This was shown to be the case in one study, Froggatt (1970a). Many of these people have more difficulty finding employment and thus are not prepared to jeopardize their present status by poor attendance. To conclude, categorisation of employee by length of service would seem to be of doubtful value.

(c) Sex

Schenet (1945), Kerr, Koppelmeir and Sullivan (1951), Behrend (1959), Hinkel and Plummer (1952), and Miller (1974) have all shown quite clearly that females have higher absence rates than males. Several attempts have been made to explain these differences.

Behrend (1959), suggested that these differences result partly from the types of work undertaken. Women in factories usually hold unskilled jobs. However, the studies of Metzner and Mann (1953) and Baumgartel and Sobol (1959) were both based on white collar male and females and they both showed females to have significantly more absence than males. This result could have been a result of an age sex interaction, male white collar workers generally being older. Further support for these findings came from Isambert-Jamati (1962) who controlled for occupational levels among male and females of eight industrial establishments. Contrary to the findings of these three studies were those of Simpson (1962). This investigation was based on 2,422 teachers and failed to find any significant difference in absence levels between sexes.

There are physiological differences between male and female that could predispose the female to greater absence than the male. Smith (1950) considered the obvious one, menstruation, but failed to find any causal links. This finding is particularly interesting when one considers that it is very likely that supervisors are apt to follow different standards for justifying absence of women and men. For example, a woman may be able to excuse herself by reporting that she, "is just not feeling well", "has a headache", etc., however, such excuses would be rarely acceptable in a male's case.

Apart from skill level and physiological differences there may be other variables which may be influencing the relationship. Take the case of a married woman who is working primarily for extra money. On purely economic grounds one can clearly see how this may influence attendance. However, one can equally imagine the situation which requires both the husband and wife to work in order to adequately feed, clothe and educate their children. Social and cultural factors may also be having strong influences, possibly over and above those factors already mentioned. We still hear it said; "A woman's place is in the home", and in spite of the current social values concerning female roles, women still take more responsibility for the care of the home and child care. The man, as a rule takes more responsibility for his job and earning a livelihood.

The multiplicity of factors that could be confounding the sex absence relationship make conclusions difficult and the relevance of any conclusions might be strictly limited in light of the changing attitudes about women's roles in society.

It does seem that serious consideration should be given to marital status and family responsibilities in this context.

(d) Marital Status/Family Responsibility

Cornwall and Raffle (1961) found married bus conductresses had more absence than their unmarried counterparts. With a male blue collar population of 2,209 Gadourek (1965), failed to find any significant relationships between marital status and absence levels. In a study involving both male and females employed in a light engineering shop Martin (1971) failed to find any relationship between marital status and absence.

The mere label of marital status would hardly seem to be an exact enough measure of one's family responsibilities. A number of authors have attempted to overcome this difficulty by considering the number of dependents. Perhaps the earliest study was that of Naylor and Vincent (1959) whose investigation of 202 females revealed that when marital status was considered there was no relationship with absence. However, when the number of dependents was considered there was a significant positive relationship ($P < 0.01$). Isambert-Jamati (1962) in her study of 3,697 females found that the average annual absenteeism rate for women with children was 2.9 and that for women without children was 2.1. She emphasized that the differences varied widely between the eight organisations she considered. Shepherd and Walker (1958) matched absence rates of males in differing wage level groups with their numbers of dependents. They found that there was a high absence with no or one dependent, low absence with two dependents and increasing absence levels with three or more dependents. These results suggest that there is an optimum level of family size which encourages attendance of work.

Gadourek (1965) has suggested an infection hypothesis to account for these findings.

"...workers who rear large families are more prone to contract cold and virus diseases than those with less frequent contacts with their environment" (P18).

However, he says that those who have to provide for large families probably take fewer risks to lose jobs by irregular attendance than single workers.

There are a variety of explanations that could be offered for these findings. Clearly attention to such matters as financial status, tax incentives or disincentives, social class etc. is essential. These factors would in themselves indicate that a more comprehensive model is needed to fit the data.

(e) Skill Level and Type of Work

Skill level and type of work are to a certain degree concomitant. Unskilled workers generally work at lower levels of mass production systems, whereas with highly skilled workers this tends not to be the case.

Although the subject has been examined in a variety of ways, the general consensus is that for higher skill and occupational levels absence rates are lower.

Some investigations have simply illustrated white and blue collar differences. Metzner and Mann (1953) in a study involving 163 white collar and 251 blue collar male workers found that the absence levels of the blue collar workers was significantly greater than that of the white collar workers ($P < 0.05$). In a much larger study involving both male and female workers, Baumgartel and Sobol (1959) found the average annual absence rate for blue collar was 9.98 days and that for white collar was 6.23 days, a difference which was claimed to

be significant although no figures were given.

Repetitive work has been indicated as a possible factor in absence conduct. Walker and Guest (1952) found high absenteeism in groups of workers in mass production situations. Kilbridge (1961) examined the relationships between repetitiveness of factory jobs and absence in two companies and failed to find any consistent relationships. He felt that a multitude of other factors were probably submerging the effects of repetitiveness and were of greater importance.

> "... the study shows that job conditions such as group pressures, the opportunity to earn incentive pay, and the absence of night shift work seem to have greater influence on absence and turnover rates than repetitiveness" (P32).

Examining a wider range of variables, Shepherd and Walker (1957) examined the extent and incidence of absence against the ratings of managers and foremen of 296 jobs, on measures of heaviness of job, temperature, continuity, and prevalence of fumes. The heaviness of the job was the only variable found to relate consistently to absence patterns. Turner and Lawrence (1965) found that their complex index of job demand and involvement, called the Requisite Task Attribute (R.T.A.) (which measured variety autonomy responsibility and interaction with others), correlated inversely with the absence behaviour of 403 male and female employees spread over eleven industries ($P < .001$). A similar study was carried out by Fried, Weitman and Davis (1972). They examined the relationship of absence behaviour of 230 employees over six months, to five facets of man-machine interaction. Three

of the measures, "sets own pace", "makes corrections and adjusts machines", and "adjusts machines" were associated with lower absenteeism ($P < 0.05$). It was suggested that the relatively high correlation between the latter two facets ($r = 0.64$ $P < 0.001$) may have indicated that they both were measuring different aspects of the same relationship. The two remaining facets, "controls flow of material" and "manipulates machine controls" were not related to absence behaviour.

Implicit in these studies has been the assumption that a high level of absence results from mass production characteristics of the work. A relationship is implied between the characteristics of the work, job satisfaction and absence rates. Logical though this assumption may be it is doubtful if it stands up when one considers the literature relating job satisfaction to absence, a subject which will be dealt with later. Furthermore it does not necessarily follow that a repetitive job, for instance, produces dissatisfaction in all workers. For some it can produce the reverse. Arendt (1958) in discussing the reasons why some workers prefer rhythmic repetitive work says;

> "They prefer it because it is mechanical and does not demand attention, so that while performing it they can think of something else". (P146)

Equally so it does not necessarily follow that all men will be satisfied with increased autonomy, responsibility, variety etc. In this connection it is important to consider the individual's perceptions of how repetitive the job is rather than those of the foreman and managers (Shepherd and Walker 1957) or researchers for that matter.

Discussion of skill levels may also be of limited value for other reasons.

> "There are status differences that may or may not covary with skill-level and there also may be corresponding differences in organisational recording, controlling and legitimizing of absence behaviour" (Chadwick-Jones et al. 1973 P146).

(f) Personality

A number of studies (Hill and Trist 1953, Arobus and Sichel 1954, Taylor 1967b, Froggatt 1970b) have shown that the pattern of absence within members of an industrial organisation resembles that of an unequal chance distribution (i.e. negative binomial). From these findings has developed the concept of absence proneness similar to that associated with accident occurrence. A number of studies have attempted to identify groups of worker personalities characterised by high absence rates.

Hinkle and Plummer (1952) compared the personality traits of 20 women with high frequency of absence with 20 others with a low frequency of absence within the New York Telephone Company. They concluded that women with high absence were generally discontented, difficult to get along with and difficult to supervise. The other group of twenty women made friends more easily and were more outward going. This finding appears to disagree with Eysenck's (1964) proposal that extroverts condition poorly and therefore find it difficult to settle down into routine jobs, whereas introverts condition more readily. Moreover Eysenck's hypothesis fails to receive

any support from the Cooper and Payne (1967) study in which the Eysenck Personality Inventory (E.P.I.) was administered to fifty-five female tobacco workers. When age and neuroticism were held constant there was no clear relationship between extroversion-introversion and absence. Taylor's (1968) findings from a study in an oil refinery do little to clarify the matter. He identified 191 men with different sickness absence behaviour such that he had four groups; frequently sick, long sick, never sick and control. A detailed clinical study was conducted on all four groups which included the administering of the E.P.I. His results suggested that the never sick were characterised by introversion and stability, the long sick by introversion and neuroticism, and the frequently sick by higher degrees of extroversion and higher neuroticism scores than the control subjects. Ferguson (1972) carried out an extensive investigation of 2,055 Post Office employees in Australia and although he found absence "repeaters" tended to be neurotic, the association, he said, was not particularly strong.

At least three other studies have examined different facets of personality than those already mentioned. Sinka (1963) administered the Manifest Anxiety Scale to 110 blue collar workers and found that the correlation between scores and absence levels was significant ($r = 0.39$ $p < 0.001$). Howell and Crown (1971) administered a questionnaire to 2,352 males which required a self-report of psychoneurotic symptoms and traits. Those men with many absence episodes had an excess of diseases which might be classified as psychosomatic.

Gadourek (1965) saw neurosis as being connected with absence behaviour and cited a number of Dutch studies to support this view.

It is difficult to reach any general conclusions from these mixed findings and indeed it might be premature to attempt to. However, it does seem that this line of investigation has sufficiently interesting findings to be worthwhile pursuing.

(g) Physical Fitness

It is a common enough view that those who repeatedly absent themselves from work are less physically fit than those who do not. There appears to be very little empirical evidence to support this view. Taylor (1968) in his physical examinations of oil refinery workers found that 28% of his 'never sick' group were found to have abnormalities, a proportion similar to that found in the 'frequently sick' and control groups. Taylor's findings related more to medical fitness as opposed to physical fitness per se. There have been at least two studies which have devoted their attention to the latter.

Maximum oxygen uptake and maximum oxygen power output provide valid and reliable indicators of physical fitness. In a study involving 203 males and females, some of whom were required to meet a standard of medical fitness before entering their occupations, Linden (1969) failed to find any relationship between maximum oxygen uptake and number of absences. However, in a more intensive study, continuous telemetric heart rate recording, which roughly indicates the level of oxygen uptake, was performed on ten employees from non-sedentary occupations during whole work days. Five of the ten

subjects were 'repeaters', that is, persons with many absences. These five were found to have much higher heart rate recordings than some of their fellow-workers who were used as controls. Linden pointed out that this means that the repeaters made higher demands on their vital systems indicating that they had poor physical fitness and that they were liable to be physically overtaxed by their daily work.

Davies (1973) examined the relationship of maximum aerobic power output to absenteeism among seventy eight East African sugarcane workers. He found that there was a small but significant negative association ($r = 0.32$ $P < 0.001$) of maximum aerobic power output with the number of days that an individual voluntarily absented himself from the cane fields.

Although this may be an interesting area of investigations practical considerations would appear to limit the usefulness of any findings being applied except in selection contexts.

(h) Cultural Factors

Variations in absence behaviour might reflect different views of accepted standards of work behaviour. Some cultures may inculcate good attendance norms; in others the workers may consider themselves entitled to stay away when they choose.

Behrend (1959) felt that cultural factors could account for the non-occurrence of absenteeism in 1951 in two German factories she studied. Gadourek (1965) also emphasized the importance of cultural factors.

> "There are certain countries (e.g. Germany) with strongly developed working habits, where work and discipline are taken for granted. In some warmer parts of the world,

inhabited by coloured people, regular work and regular attendance are rather exceptional" (P49).

Collins (1962) investigated the sickness absence of three ethnic divisions in Singapore. They were Chinese, Malays and Indians and all subjects were employed in the dockyards. He felt that if corrections could be made for occupation, grade of employment, and the place of residence, the Chinese would have rates comparable with those of the Malays.

"The Indians however, would remain largely unaffected by such corrections and would continue to produce rates approximately twice those of Malays" (P120).

Collins compared his absence rates with those of a study done within the London Transport System and found the total Asian inception rate to be somewhat higher than the Europeans' inception rate. He failed to say whether this was significant. On the basis of these studies one might expect to find differing absence rates for Polynesians and Pakehas in New Zealand.

Unfortunately there are too many unsubstantiated opinions and very little quantitative data concerning differences in work attendance of the various ethnic groups in New Zealand, a point which Pierce's (1969) thesis emphasizes. There have been a number of studies which have made attempts to see if there are any ethnic differences in absence rates but all too often they too fail to provide empirical data. McPherson (1966) said that absenteeism was rife among Maoris in some occupational categories, especially in seasonal work but he failed to provide any empirical data to support the view.

Churnton (1955) in a study of twenty five Pakehas and Twenty seven Maoris in a country town factory found very little difference between their respective lateness and absence frequencies. Foster (1969) asked his students working in a meat works to keep a record of lateness and absence. They found that if anything Pakehas tended to offend more. However, as Foster points out himself, this study was of a relatively minor nature and was uncontrolled. In the same year Pierce conducted a survey of attendance figures for one year of Auckland bus drivers and found no significant differences in absence rates between the various ethnic groups. More recently Barnes and Jamieson (1976) found that when corrections for age were made there was a trend for the Maori to be absent more often than his Samoan and Pakeha counterpart.

Clearly the subject needs a good deal of attention before anything conclusive can be said about ethnic differences. It should also be appreciated that any differences in absence rate cannot be taken as clear evidence of an ethnic group's attitude to work. Rather they may reflect traditional work patterns. To illustrate this point, take the instance of funerals. In this particular instance Polynesians customarily have a longer official mourning period than Pakehas. Furthermore it would appear that their family circles are somewhat wider than those of Pakehas, thus requiring attendance at the funerals of relatives other than the immediate family.

In considering the role of culture on attendance it is important to realise that a work group may develop its own 'absence subculture' whatever its cultural make-up. Thus

"what you can get away with" in terms of absence is obviously going to vary from industry to industry, and indeed from group to group.

(i) Summary

There has been a good deal of work done in this area but unfortunately little seems to have come out of it in any consistent sense. The discussion shows quite clearly that in most instances personal variables taken by themselves seem to be of limited value in terms of predicting absence, a point that was realised by Hill and Trist as early as 1953 .

> "... they take no account of the growing body of evidence which suggests that the behaviour and reactions of individuals cannot be adequately interpreted by reference to themselves alone. Account must be taken also of their relation to a cultural as well as to a physical environment, which, in the case of a place of work, is a highly organised structure - both technically and socially" (P359).

2.3.2 Work Variables

(a) Wages

It would appear that there are basically two schools of thought on the manner in which wages affect absence behaviour. One of these would argue that better paid jobs are more desirable. As a result, employees will do their best to retain them, and thus exhibit good attendance records. The other view argues that workers have a definite notion of the amount of money they need and when their earnings surpass this subjective norm they are thought to stop working, stay away

and enjoy their leisure. Mayo (1933) was of this view;

> "... larger earnings induce workers to take unjustifiable holidays" (P143).

Behrend in her 1959 review considered that the evidence relating pay to absence from work was inconclusive. She concluded;

> "The whole subject of the influence of wages is highly complex and it is likely that conceptions of earnings rather than actual earnings matter most. And these differ for people of different status and in different situations" (P117).

On these points, Metzner and Mann (1953) found that dissatisfaction with wages correlated with absence among white-collar but not blue-collar workers. Patchen (1960), however, found that the perceived fairness of pay was a good predictor of absence among blue collar workers.

In an attempt to control some of the personal and situational variables which may be confounding the issue, Shepherd and Walker (1958) matched six wage groups for age, heaviness of work, temperature of work environment and numbers of dependents. They found that as pay increased so did absence. However, their analysis was only descriptive. In a study of 3,900 male and female blue and white collar workers, Baumgartel and Sobol (1959) failed to find any significant relationships when age and seniority were partialled out. Gadourek (1965) in a study of 2,209 blue collar males, failed to find any significant relationships between absence and wage levels when marital status and the nature of the work was partialled out.

The conflicting nature of the results from the studies presented here suggests that a search for any simple relationship between pay and absence is naive. Clearly personal and related situational factors have to be taken into account. Perhaps one such factor that deserves further attention in this respect is whether a person can afford to be absent. Clearly those employees with dependents, hire purchase and high mortgage commitments would seem less likely to be in this position than those without. Certainly for those persons in the latter position the costs and rewards of staying away or going to work may be rather more critical.

(b) Unit Size

The relationship of unit size to individual's attitudes and behaviour has received considerable attention. In 1965 Porter and Lawler reviewed the evidence relating unit size to job attitudes and behaviour. Ten of the twelve studies dealing with absence showed positive linear relationships between absence rates and size of subunits. This finding held for factories, departments and work groups. Only two of the studies reviewed by Porter and Lawler (1965) failed to show this positive relationship. Argyle, Gardner and Cioffi's (1958) study of three different sized work groups (<20, 20-30, >30) reported a curvilnear relationship with the lowest absence rates occurring in the middle-sized groups. No significant relationships were found in the Metzner and Mann (1953) study of 378 male and female white collar workers.

Since the Porter and Lawler review there appears to have been relatively little done in this area. A notable exception is the work of Ingham (1970). For his research he chose eight organisations in the light engineering industry two of which were relatively large, employing in turn 5,000 and 3,000 employees. The remaining six firms ranged in size from 9 employees to 63. The absence data for semi-skilled and skilled workers was collected for the whole firm in the case of the small organisations and from a department in each of the larger firms. The correlation between log size and total absenteeism proved to be significant for both skill levels, $r = 0.86$ $p < 0.01$ and $r = 0.94$ $p < 0.01$, for skilled and semi-skilled workers respectively. Again, the correlations between log size and average number of incidences of absence per man per year proved to be highly significant. For skilled workers $r = 0.80$ ($p < 0.02$) and for semi-skilled $r = 0.86$ ($p < 0.01$). These findings are consistent with the previous studies reviewed by Porter and Lawler (1965).

Although the relationship between size and absence levels appears to be well substantiated it lacks strong explanatory links. In approaching the problem it is necessary to specify intervening variables likely to provide variations in rates of absence. This has not always been attempted. The large study of the Action Society Trust (1953), for instance, offered little in the way of explanation for their findings. However, there have been some authors who have attempted to examine the problem.

Talacchi (1960) and Indik (1963) both point to the relationship between size and functional specialisation and bureaucratization and in turn a relationship between the latter two variables and job-dissatisfaction, an expression of which is absence from work. Ingham (1970) examines this viewpoint in much more detail. He suggests that technology is a major determinant of functional (task) specialisation and, further, that technology is not directly related to size. Moreover he believes that bureaucratization directly affects the structuring of the level of non-economic records in an enterprise and the nature of the organisational control system. However, many of these views await verification.

At this stage it seems prudent to treat the findings cited above with caution for as has been illustrated, size as a variable is associated with many other variables, which may themselves be more direct contributors to absence behaviours.

(c) Sick Pay Schemes

In 1948 the British Government introduced a scheme for paid sick leave for industrial workers in Government Employment. Under this scheme an employee who was absent from work due to illness received his flat pay rate for as long as 13 weeks in any year. The qualifying period was 26 weeks. In examining the effects of the scheme Buzzard and Shaw (1952), in a study of 8,000 males, showed that sickness absence as a whole appeared to have doubled. Further analysis of their data found no evidence to suggest that a sufficient explanation of the general increase was to be found in terms of age distributions, skill levels, or incentive payments. However, they discovered that there was a high absence rate among those about to terminate their jobs.

Denerly (1952) examined some of the effects of the introduction of sickness benefit schemes in two organisations. In one company the absence rose from 2.6% in the year before the introduction of sick pay to 6.1% after it was introduced. However, in one department where bonus earnings were exceptionally high, the introduction of sick pay had no effects on sickness absence until earnings were substantially reduced. In the other company, sickness absence for 'established' men was roughly double that for non-established men. There are a number of possible explanations for these increases. Denerly pointed out that the introduction of the sick pay scheme in one company coincided roughly with the start of the National Health Service in Britain. The combined effect of these two schemes was to alter the financial position of workers during sickness, especially those with families to support. Workers who formerly had been unable to afford operations or long courses of treatment were now more likely to do so. Denerly also discovered that the greater incentive to obtain medical certificates led in some factories to more accurate classification of the reason for absence. Hence a comparison of the recorded sickness rates is somewhat invalidated. Further discrepancies could also be accounted for by the fact that a number of workers could have also been benefitting from friendly societies.

Adopting an entirely different approach Enterline (1964) compared the sickness absence levels of Canada and U.S.A, neither of which had a national compulsory cash sickness benefit programme, with 12 European countries, which had national compulsory sickness benefit programmes. The percentage of the

working populations absent on average in European countries was two to three times that for Canada or the U.S.A. However, as Enterline pointed out, unemployment rates are higher in Canada and U.S.A. in comparison with the European countries and it is likely that high unemployment excludes from employment those whose health is marginal.

Taylor, Pocock and Sergean (1972b), in a study involving 29 organisations, failed to find any relationship between the absence rates and the kind of sick pay schemes in operation.

Although the evidence is not strong, it tends to support the view that absence increases with the availability of sick pay but confounding variables are operating once again which make this conclusion somewhat limited and at best tentative. It is important to realise that such a conclusion is only relevant for a stable work force. If an organisation has a very high labour turnover (very few employees staying long enough to qualify for sick pay) and a very high absence rate the effect of any sick pay arrangements can be considered to be minimal. Furthermore in this situation it is possible that the 'old hands' absence is scrutinized less.

Another point to note is that the dependence of absence behaviour on sick pay arrangements should not be taken as clear evidence of malingering. It could be that employees cannot afford to be off sick without pay and as a consequence attend work in a state of ill-health. They may also be reluctant to jeopardize their continued employment. Partial support for these views is provided by Taylor (1968) who found from physical examinations that one quarter of those who were never sick had or had had some organic disease. We are all

aware of the employee who goes to work with a chronic cold and spreads the infection further.

Finally, it has been suggested by a number of N.Z. employers that the introduction of the Accident Compensation Act has increased absence levels.

In closing it is worth bearing in mind that the advantages of sick pay schemes, while not necessarily readily apparent, can be very real.

> "... removed much of the financial worry and anxiety which many workers had previously associated with sickness absence." Denerly (1952 P279).

(d) Attendance Schemes

Although attendance schemes are relatively common, studies examining the effectiveness of them are not.

Grove (1968) examined the effect of a $100 reward for six months of perfect attendance behaviour among 142 office, technical, maintenance and production staff over a period of one year and found that absence had dropped by 34%. It should be noted too that the absence levels were extremely low to start with.

Lawler and Hackman (1969) in a study of the absence behaviour of nine groups of part-time cleaners found that where the groups developed their own attendance scheme there was a significant drop in absence ($p < 0.001$) whereas in those situations where an alternative scheme was imposed on a group there was no significant changes in absence levels.

Pedalino and Gamboa (1974) used behaviour modification techniques in an attempt to decrease absenteeism in a sample of 215 hourly paid employees at a manufacturing/distributing

facility. The behaviour modification procedure consisted of four phases; (1) absence baseline levels were established, (2) the programme was run every week for six weeks, (3) the programme was operational every other week for ten weeks, (4) the programme was removed. A poker game incentive plan was chosen as the intervention strategy. Each day each employee who came to work and was on time was allowed to choose a card from a deck of playing cards. At the end of the week the person with the highest hand won $20. The results showed that absence rates for the sixteen weeks the programme was in operation were 18.27% below normal ($p < 0.05$). However, a twenty-two week follow up after the incentive system was phased out showed that the absence levels had returned to previous baseline levels.

This last study emphasizes the importance of examining the effects of attendance schemes over long periods of time. It would also seem very relevant to investigate the employees' understanding of such schemes.

In closing, attendance schemes need to be put in perspective. People are absent from work even though it means a loss of a day's pay regardless of any attendance bonus. It is easy to imagine then that if attendance bonuses are not substantial they would rarely be considered when such a decision is made. It is also the case under some schemes that if an employee is late once in a week he automatically loses his bonus for that week, whatever the reason for his lateness, legitimate or otherwise. The efficiency of such a scheme for reducing further lateness for that week, as well as absence, would clearly be in question.

(e) Shift Work

The studies which have examined the relationship of shift work to absence behaviour can be dealt with under the following three categories;

1. those which make comparisons of permanent shift workers absence with that of permanent day workers.
2. those which make a comparison of the absence behaviour of groups of shift workers before and after a change in the shift system.
3. those which compare absence rates of the different shifts within a rotational system.

Permanent Shift vs Permanent Day. Taylor (1967a) compared the absence rates of 666 workers on a rotational shift system with that of 717 workers on day work. His figures showed that;

> "the continuous three-cycle shift workers have consistently and significantly lower rates of sickness than day workers in similar occupations. The annual inception rate (spells) standardised for age was 108% for shift workers and 182% for day workers" (P93).

Taylor postulated that this difference could largely be accounted for by the fact that work patterns and group relationships of most shift workers were different from those of day workers, coupled with the preference that many shift workers had expressed for their hours and the higher degree of job satisfaction and identification with their work. The Walker and de la Mare (1971) investigation used a slightly different approach to that of Taylor. They compared absence behaviour of 579 permanent night workers with that of 579 permanent day workers. The groups were matched for age and as far as

possible for job and they came from three sections of one organisation. They failed to find any consistent differences between the shifts. Taylor, Pocock and Sergean (1972a) examined the absence records of 965 pairs of men, matched for age, workplace and occupation, from twenty nine organisations, over a two year period. Six types of shifts were involved and absence records included certified sickness, short sickness and non-medical sickness absence. The overall results showed that there was a general tendency for shift workers to have less absence than day workers. In a follow up paper (1972b) Taylor et al. examined some factors in the working situation with which such inconsistency might be associated. They found no evidence to suggest that either the nature of the sick pay provisions or the detailed design of the rota could account for the difference. They did however, find a "moderate" association between sickness absence and hours of work and a stronger one between sickness absence and pay. The trend was such that;

> "... the more favourably placed financially was the shift man relative to his colleagues in a similar occupation on day work the less satisfactory is his record likely to be for certified sickness absence". (P340)

In a study which was primarily concerned with investigating the influence on health of continuous shift work Aanonsen (1964) found that a group of 380 continuous shift workers had 30% fewer days absent from work than a group of 345 day labourers. This was the case both in a one year study and a retrospective 13 year study of an older age group, (51-65 yrs).

The weight of the evidence presented here would suggest that shift workers in general are absent less often than day workers.

Shift System Changes. Walker (1966) studied the absence behaviour of 88 males in a chemical works before and after a change from a seven day shift cycle to one involving more frequent alterations. Using eight men who continued to work under the old system as a control he failed to find any evidence of a change in absence behaviour. In a very similar study Pocock, Sergean and Taylor (1972) examined absence levels of 782 males in a food manufacturing company before and after a change from a traditional seven day rota (i.e. seven days on one shift) to a rapidly rotating continental rota (i.e. only two or three days on each shift). After the change over certified sickness absence rose 36%, uncertified sickness absence rose 29% and other reasons absence fell 2%.

Time to adapt would appear to be an important consideration in studies such as these and it remains to be seen if absence levels remain the same over larger periods.

Shifts Within Rotational Systems. Wyatt and Marriott (1953) examined the absence records of ten factories (involving 27,000 males) which operated fortnightly rotational shift systems and found that there was little difference when comparisons were limited to the same men employed on day and night work in alternative periods. Examining a weekly rotational two-shift system confined to one factory and involving 294 males and females, Martin (1971) found that there was significantly more uncertified absence on the day shift as opposed to the

afternoon shift ($p < 0.01$). On the other hand, the certified and total absence figures showed no significant changes. In 1956 Shepherd and Walker investigated the absence records of 628 males of an Iron and Steel works, who were all on a three-shift rotational system. They discovered no gross differences in absence levels between shifts, but 75% of all absences without permission, occurred on the morning shift. One possible explanation for this finding is the difficulty involved in getting up early to start with the morning shift.

In a study of a similar shift system which operated over a five day week, Sergean and Brierly (1968) found absence to be worst at nights, best in the afternoons and intermediate in the evenings.

Understandably the above studies fail to provide a clear and unified picture of the way in which shift work may be related to absence. Generalisations are hindered by the wide variety of systems covered by the term shift, and the lack of details on whether the shift work operates 24 hours, 7 days a week, and variables such as transport and social life, which may be mediating in shift absence rates. As an example, the family man may find it difficult to attend work in the weekend as this may be the only time he has free to spend with his children. Similarly the single person may find that weekends are the only times that he can take part in recreational activities.

(f) Overtime

Overtime can be seen to influence absence behaviour in a number of ways. If one is of the view that high wages act as an incentive to attendance, then it seems a logical step to suggest that absence levels will drop as the availability of overtime increases. The alternative view is that overtime acts as a barrier to attendance. This is said to happen in two ways. When a person has worked long hours on overtime he may take time off knowing that he has covered any consequential loss of earnings. Secondly, he may need to rest to overcome the fatigue caused by his longer hours of work.

One of the earliest studies to examine the relationship of overtime to absence behaviour was that of Buck and Shimmin (1959) involving seventy-six males in a light engineering factory. They failed to find any relationships between overtime and absence behaviour. No mention was made of the type of absence measured or manner in which it was measured. Mason's (1962) study of sixty female machinists indicated a negative relationship which was described as significant "although only at a moderate level" (P55). Using a more sophisticated approach Taylor (1968) examined the amount of overtime worked by the; frequently sick, long sick, never sick, and control groups and failed to find any significant relationships. He mentioned that a high percentage of the frequently sick group had other jobs. A year later Ryder (1969) found that the frequency of short non-sickness absences decreased as the amount of overtime became available, for 105 males of a general engineering firm 85% of whom were tradesmen. Although it was implied that this result was significant no figures were

presented to support this. Walker and de la Mare (1971) using 1,158 men spread throughout three groups of the one company, failed to find any relationship between absence from work and overtime. In a study involving three companies and 549 blue collar workers Eastman (1972) found the same result.

Trying to summarise these studies seems somewhat pointless, partly because of the small number involved but more importantly due to the lack of information these studies have given on the manner in which the overtime was organised. Answers to the following questions seem very important; Is the overtime voluntary or not?, Is it offered to employees on a strictly random basis?, Is the overtime regular and if not how much warning does one have of it?, Is the amount of overtime consistent?, Do employees have to have a perfect attendance record for the preceding five days for example, before qualifying?, What are the rates of payment for overtime? It is only when attention is given to these details that one may be able to come to some understanding of the way in which overtime could influence attendance behaviour.

(g) Supervision

It seems reasonable to suggest that the manner in which a supervisor supervises may affect absence behaviour. Surprisingly very little work has been devoted to this area, even though a number of writers have seen it as being a potentially significant factor. Conver (1950) found that the size of the department was closely related to absenteeism and speculated that this was largely a factor of supervision; the larger the department the greater the need for skilled supervision. However, it was not until 1955 that any attempt was

made to relate supervisory practice to absence behaviour.

Fleishman, Harris and Burtt (1955) investigated the relationship between the supervisory style of 58 production foremen and absenteeism among their subordinates. They found that absenteeism was negatively related to 'consideration' ($r = -0.49$ $p < 0.01$) and positively related to 'initiating' structure ($r = 0.27$ $p < 0.05$). In a similar study Lundquist (1958) found consideration to accompany consistently low levels of short-term absence. Using ninety foremen in eight factories Argyle et al. (1958) in an attempt to relate five dimensions of foremanship to absenteeism found that a 'democratic' style of supervision was negatively related to their Worst Day Index of voluntary absence ($p < 0.05$).

The small amount of work in this area does not allow one to be conclusive about a relationship between supervisory style and absence behaviour. Apart from his style of supervision per se the supervisor may be influencing attendance behaviour in at least one other way. In many instances it is the supervisor who is in charge of absence recording, control and discipline. The manner in which he goes about these duties may affect absence behaviour. It would seem that the tendency to take a day off would be less prevalent under a strictly controlled system of recordings, control and discipline than under a milder one. A further point worthy of attention is the possibility of favouritism affecting the supervisor's diligence in reporting absence.

(h) Conditions of Work

In the context of this review conditions of work refer to the physical environment in which a job takes place, e.g. conditions of heat, noise, dirt, lighting, etc. Although there have been numerous studies examining the effects of such variables on fatigue, vigilance etc. in laboratory and real life situations those directly dealing with absence behaviour are few. Behrend (1959) in a review of these studies concluded

> "The evidence so far gathered suggests that high absenteeism does not follow of necessity from poor working conditions, but serious rates of voluntary absence are connected with "bad jobs". (P121)

Since that date there have been few if any studies examining this relationship. Chadwick-Jones et al. (1973) in a review of much of the same material agreed with Behrend.

Apart from the implied link between dissatisfaction with one's working conditions and the resultant absence there would also seem to be an association between sickness absence levels and conditions of work, dust, draughts etc. being detrimental to health or comfort. Furthermore, it may be worth noting that the effect of some of these variables may change with the seasons. For instance, working near a furnace may lose any attraction it may have had in the change from winter to summer just as working outdoors may do in the reverse manner.

(i) Summary

As with the personal variables the attention devoted to work variables has been considerable. Unfortunately however a good deal of it is of limited value. The failure to provide or discuss details of what even on apriori grounds appear to be obviously relevant details has been a major fault of some studies. The treatment of overtime illustrates this. Comparisons of various studies have been seriously limited merely by lack of information on various variables, for example shift work. It is difficult to know whether the lack of information reflects faults in research design or whether space limitations in journals force authors to omit a considerable amount of the detail of their studies. The failure to consider the perceptions of individuals in relation to matters such as pay and condition of work adds little to our understanding. Finally in a number of instances the small sample of studies restricts one from reaching any firm conclusions.

Although the research has been considerable in volume the gaps in our knowledge appear to have diminished relatively little.

2.3.3 Contextual Variables

(a) Journey to Work

It has been contended that absence from work is influenced by the distance the employee has to travel to work. Liddell (1954) found that attendance was better at coal pits where the men had less distance to travel on the average. Gadourek (1965) and Martin (1971) both failed to show any significant relationships between distance to work and absence.

Taking a slightly different approach some authors have considered the time taken to travel to work as opposed to the actual distance to work. Garland (1936) reported differential absence rates for groups of girls who travelled respectively less and more than twenty minutes to work (Average number of days lost per year 117 and 203 days respectively). The findings of Knox (1961) also corroborate these findings.

Some authors have suggested that it is not so much the distance to work or in fact the time taken to cover it but rather the method of transport used in getting to work. In a study of 8,000 blue and white collar males and females Isambert-Jamati (1962) found no significant relationship between travel time and absence for men, but a significant positive relationship for women. She hypothesised that men, as opposed to women, tend to have cars to go to work in as they have more of the better paid jobs. Taylor (1968) in a study of 194 male refinery workers found no significant relationship between time taken to travel to work and sickness absence. In an examination of the means of transport used by employees he found that over half of them came by car but only 28% of the "never sick" did so. Furthermore 40% of this later group cycled to work. When one considers that they were older, more highly paid and most of them shift workers the findings become very interesting.

The last study indicates not only the importance of considering the means of transport but also the subtle variables that may be intervening in supposedly simple relationships between the journey to work and absence. For instance, the attendance of a worker who relies solely on public transport seems to some extent to be related to the closeness and

frequency of bus and/or train services. It also seems likely that the attendance of those workers who rely on being transported to work in a workmate's car will be related to the attendance of their workmate. No doubt this relationship will be even stronger where the individuals concerned are shift workers and the alternative transport is expensive, e.g. a taxi. On this point another factor worth noting is that a bus driver is not going to wake and/or wait for someone who has slept in. However, it does seem likely that a workmate who has come to pick someone up may do so. A missed train or bus in some areas, particularly rural, may make arrival at work later in the day to be seen as a waste of time. Finally, travellers are more exposed to infection on buses and trains and long travelling hours mean longer work hours for the employee, with consequently more fatigue and psychological stress.

(b) Level of Unemployment

It seems plausible that the level of employment could be an important factor in the level of absence. Under full employment a worker may not be afraid of taking a day off. Because the organisation is desperate for workers he assumes he will not be dismissed for irregular attendance. In the event that he is dismissed he feels confident that he can obtain another job with relative ease. However, when unemployment levels are high, fear of dismissal may increase and thus absence decreases.

Behrend (1953) was probably one of the first to investigate the influence of the economic situation on absence. Thirteen of the fourteen factories of a Birmingham Engineering

Company experienced a significant ($p < 0.01$) reduction in absence during a period of relatively high unemployment.

Plummer and Hinkle (1955), in a very extensive study involving approximately 75,000 employees of the New York Telephone Company, over a period of twenty seven years (1923-1950) found that absence levels were at an all time low during the depressions of the 1930's and at their highest during the war years, a time of full employment. The statistics for this study were descriptive.

Crowther (1957) plotted four years absence and turnover trends in ten plants against local unemployment levels and found that the pattern of falling and rising turnover coincided with a pattern of falling and rising unemployment.

Enterline (1966) found a negative relationship between the unemployment percentage and the sickness percentage for seven countries. However, it should be noted that the sickness absenteeism figures related to 1956 and the unemployment figures to 1960.

Taylor and Pocock (1969) comparing sickness benefit figures for the period 1949-68 with the level of employment for the same period failed to find any significant relationships after trend elimination for sickness rates in the years in which influenza epidemics occurred was taken into consideration. In the same paper they report a further study in which they compared unemployment and sickness rates for ten geographical regions of Great Britain and found that high regional unemployment tended to correspond to higher rates of sickness. The correlations were all positive, ranging from

0.49 to 0.70. Finally they found positive and significant correlations between both measures for 38 English towns and cities.

Within British Railways, Owens (1966) found that employees who had an expectation of security of tenure in their employment in terms of threatened redundancy had less absence which was attributed to sickness than did those whose future was insecure. The numbers in this particular study were relatively small (18 and 41 respectively). Owens failed to consider if the 'Insecure employees' were absent because they were job hunting. In a similar study Hershey (1972) compared the absence behaviour of 100 employees who knew they were to be laid off with 100 employees who knew they were not to be laid off. He found no significant changes in absence behaviour in either group during a subsequent three-month period. As did Owens, he also failed to mention if the reasons for absence may have changed. Also it seems likely that a number of those who knew they were not to be laid off may have had fears about future lay-offs.

Dijkstra (1975) argued that macro analysis should be abandoned because of its inherent methodological weaknesses. Adopting a mess level analysis he examined sickness absence in two groups of firms over a four-year period. One Group ('decreasers') consisted of ten firms which were obliged to cut down on the employee population as a result of reorganisation. The other group ('constants') consisted of twelve firms whose employee numbers remained constant over the period. He found that 'decreasers' were characterised by a relative decline in sickness frequency ($p < 0.05$).

The findings presented here represent something of a mixed bag. If one had to generalise one would feel inclined to say that the results suggest a decline in absence with rising unemployment. This conclusion however awaits further confirmation. What would be of interest in this context would be an inter-country comparison between those countries whose governments practise full-employment as a political policy and those whose governments do not. One of the obvious candidates for such a study would surely be New Zealand.

The influence of the unemployment level is particularly interesting in New Zealand's case where full employment is a political policy followed by both major parties. Under such a policy the threat of dismissal for reasons such as poor attendance has less significance when an employee can walk across the road and get a similar job at the same rate of pay.

(c) Daily Variations

The study of daily variations provides yet another approach to the investigation of absence from work. It is often said that absence is lowest on pay day. Behrend (1959) quoted two studies which failed to support this view. One of these studies showed a regular decline in absences from Monday to Friday. This study suggested that there may be more powerful factors influencing attendance - for instance one's non-work life.

Taylor (1967a) found, among day workers working a five day week, sickness absence was greatest on Mondays, accounting for 33% of all sickness absence, and it dropped off

progressively through the week. Martin (1971) found that single day absences were most frequent on Mondays and least on Fridays among workers working day and afternoon shifts over a five day week. The New Zealand Department of Labour (1975) showed absence to be greatest on Mondays and Fridays. It is not too difficult to advance an explanation for these results. If one has had a very enjoyable weekend it may become difficult to attend work on Monday particularly if one does not find the work very satisfying and one is hung-over, tired etc.

A good deal of most people's leisure time involves partaking in activities with others whose leisure coincides. But what happens when this is not the case? One of the often quoted disadvantages of shift work is that it disrupts one's social life. Taylor's (1967a) investigation of sickness absence among oil refinery workers has been the only study to date which has concerned itself with shift workers on a 24 hour seven day a week operation. He found that the number of absences starting on a Friday were significantly higher ($p < 0.001$). This was one of the two shift change days. On the basis of this single study one obviously cannot reach any general conclusions. Any future studies of this nature may do well to consider the marital status of the individuals concerned as well as the incentives offered for working on Saturdays and Sundays, two factors which may be confounding the results.

The subject of daily variations is far from simple. The evidence to date is far from conclusive, there being a number of possible confounding variables, some of which have already been mentioned. Finally mention should be made of . Nord,

Walker and Costigan (1973) who carried out a longitudinal study of worker adjustment to the change to a four-day week. The absenteeism level showed a decline after the change and was continuing to decline one year later.

(d) Sporting Fixtures

Although one often reads in the local newspapers about the disruptive effects sporting fixtures have on attendance there do not appear to be any empirical studies on the subject in New Zealand or for that matter overseas. On logical grounds there must be a connection if one examines the attendance figures at large sporting events.

> "In a technological stage of development in which repetitive work predominates and sport enjoys a high prestige, motivation to work will be lower in the case of young people than in a cultural setting where jobs are interesting and sports idols comparatively unknown" (Gadourek 1965 P29).

(e) Climates

There are a number of ways in which the weather may affect absence from work. The common cold is prominent during winter months and one would expect some decrease in attendance at work as a result. The weather may also take its toll on public transport, snowfalls and the like disrupting services, although in New Zealand these effects over a year would appear to be minimal even in the South Island. Alternatively the extremes of winter and summer may be such that they make the working environment unattractive to the worker.

Possibly the earliest study to suggest the effects of climate on attendance was Liddell's (1954) in the coal mining industry. He found in one coal mining area that:

> "There were considerable fluctuations in attendance early in the year - a period of heavy snowfall" (P79).

However, he failed to provide any data in support. Behrend (1959) said that she was;

> "Unable to distinguish weather as a factor in daily variations in absence in the investigation of one company over a period of six years. Here seasonal fluctuations were clearly due to sickness". (P124)

To date these have been the only studies to have considered this variable. The lack of interest could be because many consider that the side effects of weather are uncontrollable.

(f) Summary

In relative terms the work on contextual variables has been somewhat meagre. This is somewhat surprising in view of the powerful influence many of them appear to be capable of exerting on absence from work. A possible explanation for this lack of attention could be that many employers and thus researchers feel that most of these are outside their control and as such any research on them is of limited utility. However, that need not be the case in all instances. For example the travel problems of employees have been alleviated by some organisations providing their own transport. In any event the aim need not be control.

> "The deeper understanding that emerges from such an analysis may be worth while in itself without any specific action being taken about absenteeism" Behrend (1959 P134).

A further barrier to attention is the difficulty involved in measuring these variables.

Clearly further attention is required particularly to such matters as absence culture of the factory, leisure activities, second jobs, etc.

2.3.4 Job Satisfaction

The Brayfield and Crockett (1955) review of employee attitudes and employee performance was the first to examine and summarise empirical literature on the relationship between satisfaction and absence from work. On the basis of the seven studies reviewed they felt that the data was only suggestive of a negative relationship. They felt that this conclusion was directly attributable to limitations of the then current literature. In particular they were very critical of three methodological areas; sampling, measurements and the general procedure. Typical of the criticisms in each of these respective areas were:

> "... reports frequently fail to state how respondents were selected, the possible selective biases, or the population which the sample is supposed to represent." (P409)

> "Research reports sometimes fail to describe the specific measurements that were used. In addition, there is extreme diversity in the kinds of attitudes that are measured, and in the questionnaires and interview schedules that are used to identify or measure them." (P409)

> "Another procedural defect of some industrial studies is the use of self reports or similar criterion data rather than independently obtained measures." (P411)

Several years later Vroom (1964) briefly reviewed the literature again. In all he examined nine studies, four of which had been previously reviewed by Brayfield and Crockett (1955). His conclusions were somewhat vague in that he said that there was a negative relationship between job satisfaction and absence but it was less consistent than that between job satisfaction and the propensity to leave an organisation. Furthermore, some of the material on which he based his conclusions seem to be of doubtful value. For instance the Kornhauser and Sharp (1932) investigation gave no indication of the magnitude of the relationship, Van Zelst and Kerr (1953) had only one question pertaining to job satisfaction and used self-reports to measure levels of absence, and Harding and Bottenberg (1961) used "estimated absences" as the criterion of absence behaviour.

The next major review occurred in 1976 when Nicholson reviewed twenty nine studies dealing with the relationship between absence and job satisfaction. His summary remarks echo those of Brayfield and Crockett (1955).

> "Looking across the 29 studies reporting on the question it is outstandingly clear that inconsistencies abound in methods and measures used, populations sampled and results reported, and few have sought or achieved any sophistication or comprehensiveness of approach" (P3).

In an attempt to resolve these anomalies Nicholson conducted his own investigations in which he (a) sampled across a large number of geographically dispersed organisations, (b) contrasted the attitude and absence rates of production workers in four different technologies, (c) used multi-dimensional measures to tap different types of absence and areas of satisfaction, (d) simultaneously measured biographical factors to gauge their potency as mediating variables. His results failed to show any relationship between job satisfaction and absence behaviour leading him to conclude that at best the variables are tenuously related.

In reading the original studies that have been reviewed one cannot help but agree with the criticisms and conclusions of Brayfield and Crockett (1955) and Nicholson (1976). It is interesting to note that the Nicholson suggestion, that further research should take a greater in depth look at this behaviour, is very similar to that made by Brayfield and Crockett some twenty years ago, namely:

> "We seem to have arrived at the position where the social scientist in the industrial setting must concern himself with a full scale analysis of the situation" (P422).

It would appear then that further attempts to determine attitudinal predictions of withdrawal behaviour without consideration of situational and personal variables seem to be of rather limited value.

2.3.5 Conclusions

In studying the research one is struck by the multitude of factors that seem to have been related to absence, an indication of the multi-dimensional nature of the subject. This point seems to have been ignored by most authors, a notable exception being Gadourek (1965). Rather, the concern has only been with one or two variables in one organisation or over a wide range of organisations. In general there has been a lack of intensive studies within a given situation. More important though has been the apparent contradiction of results. As the review has already shown this has been the result of a variety of causes, reference having been made to such matters as cross-sectional versus longitudinal designs, the superficial manner in which many of the variables have been dealt with, failure to consider confounding variables and perceptions of individuals, and general lack of information. Explanation can also be sought in measurement problems, a topic which was discussed earlier.

In spite of the vast volume of literature we seem to know little about the reasons which characterise an employee's refusal to report for work - a refusal which costs millions of dollars a year, even in a country with as small a work-force as New Zealand's.

2.4 THEORY

There is a large number of research papers on absence from work, the majority of which are empirical studies with little theoretical discussion. A direct result of this is that there has been relatively very little attempt to systematise the data within some more general explanatory framework. However, there have been some exceptions.

Gibson (1966) presented a formulation to explain the conflicting findings of absence research to that time. Gibson felt that since absence behaviour is very closely bound up with contractual relationships between the worker and the employing organisation an understanding of the contextual implications of: (1) the forces that shape the behaviour of the individual, (2) the dynamics of the organisations and (3) the terms and processes by which the individual and the organisation are bound together, should provide a theoretical framework.

He assumed that work behaviour is directed toward need satisfaction and that the work decision reflects the operation of the individuals belief-value system resulting in identification, characterised by a valence, which in direction may be positive or negative, and strength which may be strong or weak. The resultant of a variety of objects of identification he called core identification.

The individual worker's behaviour is directed toward need satisfaction and is limited to his own unique capacities. Joint activity with others permits unique capacities to complement one another resulting in greater need-satisfaction for members and providing the basis for organisation and

division of labour. The result is that organisations come to be characterised by goal-orientation based on gains to be derived from a cooperative relationship. Analogous to the individual the organisation has a belief-value system which guides decision and performance toward goal attainment. This belief-value system provides the basis for; deciding on rules and regulations, positions etc., but, more important it constitutes a duties-reward system. Gibson saw this as the "point of nexus" between the need-satisfaction activities of the individual and the goal attainment activities of the organisation. Gibson said that this exchange could be thought of as a contractual process through which rights and duties are specified and relationships legitimised. The events which represent the life of the individual he designated life-space and those of the organisation, organisation-space. Where they overlapped he called this the work-space.

On the basis of this formulation an absence event is assumed to be the result of the operation of the individual's belief-value system and is impeded or facilitated by the strength and direction of identification within the work-space and in the life-space outside the work area. Thus of core-identification is weak or negative, it is assumed that it will be easier for the person to legitimise his absence to himself.

Gibson presented findings of studies on absence behaviour and reviewed them with respect to the appropriate parts of his conceptualisation. There appears to have been no further work on this model.

Hill and Trist (1953) were of the view that accidents may frequently be caused by the individual's conscious or unconscious motivation to withdraw from the work situation in a way acceptable both to himself and to his employer. In so far as accidents can be viewed as "positively motivated forms of absence" they proposed that they would be positively associated with other forms of withdrawal, such as sickness and absenteeism. In an examination of the absence and accident patterns of 289 men over a period of four years they found that those individuals who had accidents showed a significantly greater tendency to be absent than those who had never had an accident ($\chi^2 = 25.86$ $p < 0.001$).

In a subsequent paper (1955) they examined the changes in accidents and absences with length of service. On the basis of these investigations they developed a number of explanations of absence behaviour. They suggested that absentees be conceptualised as "stayers" as they are consciously or unconsciously seeking means of temporary withdrawal without severing their ties to the organisation. Their investigations showed that high absence levels characterised the stayers group during their second and third half years of service. It was suggested that this was the result of a two-fold process. On the one hand, these stayers have learnt the prevailing absence culture. On the other hand their need to do so is greater, for it is when the role of stayer becomes fully taken and the person begins to identify himself with being part of a firm that the role of the leaver becomes less available to him as a means of alleviating stress arising in his relationship with the firm. Subsequently the relationship stabilizes

and the individual exhibits reduced levels of absence. During this period there is a progressive tendency to substitute sanctioned forms of absence for unsanctioned. This, Hill and Trist argued, reflected an improved relationship with the firm. Within this framework it follows that accidents should fall over the course of service and this was shown to be the case.

Hill and Trist have provided somewhat psycho-analytical explanations for these phases and the exceptions to them. However, from a practical point of view they recognise that this focus is not very valuable, but they fail to provide alternative explanations.

Castle (1956), in a replication of the Hill and Trist studies, reached the conclusion that the hypothesis advanced was inadequate to account for all his own findings. He suggested that the theory needed modifications which could only be arrived at

> "... by a full consideration of the social environment of work, with particular attention to differences in group structure, social climate, and occupational tradition, as well as the nature and hazards of occupations themselves that characterise different firms and their apparently widely differing absence cultures" (P232).

Knox (1961) focused upon the social structural factors and extended the Hill and Trist withdrawal conceptualisation by taking into account a variety of intra- and extra-plant factors that other studies have found to be associated with absenteeism. These he listed under the headings of "incentives"

(e.g. wages, physical and social conditions of work), "barriers to attendance" (e.g. family conditions, distance from plant) and "barriers to adjustment" (e.g. age, unfamiliarity with area). His findings supported his hypothesis that absentees are intermediate between high frequency attenders and leavers.

As (1962) followed up some of the ideas presented by Hill and Trist and Knox. He suggested that the greater attention should be paid to the kind and strength of the tie between the employees and the company. He took attitude measure, on several dimensions, towards the job and the company, as indicators of the kind of tie that exists and correlated these with absenteeism rates. In general he found that high satisfaction was associated with a high degree of absenteeism. As however said he could not readily give an adequate explanation for this finding. He presented what he called a "Push Pull" model of absenteeism in an attempt to explain the findings. He hypothesised that those employees with a low satisfaction with the immediate work situation will have a high level of absence if they have a high satisfaction with the company in general. On the other hand those with a high satisfaction with the immediate work situation will have a high level of absence if they have a low satisfaction with the company in general. In an attempt to test his hypothesis As reanalysed his data. Using three measures of absence (absenteeism, lateness, leaving early) he found that in general the data supported his views.

The advances in the theory of absence behaviour can hardly be considered substantial. Probably the biggest hindrance to

the development of theories has been the multitude of factors that have been associated with absence from work, together with the many contradictory findings. As such then, the theories outlined have some significance in that they have attempted to provide some sense of the myriad empirical facts. However, from the practitioner's perspective they are each of limited value.

CHAPTER 3

METHOD

3.1 AIM, RATIONALE AND RESEARCH STRATEGY

The aim of the investigation was to examine the relationship of a number of personal, work and contextual variables to absence in a work situation, with particular emphasis being placed on previously unexplored aspects, thus adding additional evidence to our accumulated knowledge about the factors which are related to absence from work. No formal hypotheses were advanced. The study was seen as exploratory in nature as opposed to hypothesis testing. Thus the relative focus was on band width rather than fidelity (Campbell 1971), i.e. the examination of a number of absence related variables instead of detailed attention to any one.

The practical reasons for such an investigation are self-evident. Reference has already been made to the extent of absence from work in New Zealand and to the fact that there has been very little investigative work either as essentially replications of overseas studies or as new approaches to the matter. Furthermore it is evident from the foregoing that there have been sufficient inconsistencies in reported relationships and gaps in our knowledge as a result of the overseas studies that further investigations seem warranted.

The literature review suggested a number of possible ways of carrying out the aims of this investigation. Emphasis was placed on the need for an in-depth approach with each subject. This, together with the complexity of the factors involved and

the uniqueness of their contribution in any particular work situation, and the limited time available, indicated that the investigation should preferably take place in one organisation. Such an approach would enable an investigation of a wider range of independent variables instead of drawing all the attention to one single variable as has been the case in many studies. It was also decided at an early stage to limit the investigation to male blue-collar workers. This decision was made for two reasons. One, this is a relatively accessible population. Secondly to examine both sexes in a small investigation might unnecessarily complicate the design.

Although the detailed procedure would be largely determined by the characteristics of the cooperating organisation some general methodological details were decided upon prior to approaching an organisation. In particular they related to the measurement of the dependent and independent variables.

3.1.1 Absence Measurement

The original intention was to measure overall absence levels, thus providing information on daily variations and individual levels.

The literature review indicated that the frequency index provides the best measure of absence. However, the suggestion was made that in certain situations the percent time lost index might be more appropriate. From the researcher's point of view, this might be the case when considering the relationship between say, absence and marital status. From a company's point of view such a measure is more relevant for economic

considerations and comparison with other companies. This being the case both measures were adopted.

3.1.2 Independent Variables

It was evident from the literature review that a quest for more exact knowledge of the causes of absence is confronted with a large variety of possible explanatory variables. In adopting an exploratory approach the choice of variables is dependent on a number of considerations. The practical aspects of gathering information on any particular variable have to be considered. If one is to receive the cooperation of a company, one has to bear in mind the utility of any findings to the company concerned and where possible investigate any variables they may feel are worthy of consideration. Normally the researcher must also be aware of time constraints. This being the case those variables which are considered to be of the greatest importance naturally receive priority as do those which require little time to measure (e.g. age). Furthermore in any particular company a number of variables can automatically be excluded because their effects can be considered minimal if not non-existent, e.g. race in a company with very few non-pakeha employees, or they are not relevant. Other variables may clearly be beyond the scope of the investigator (e.g. physical fitness) and yet others may require too great a time investment for what could be a small return.

It is quite obvious that the decision as to the independent variables one is going to measure has to be left largely until after preliminary information gathering is conducted within the organisation. However, it was an aim of this

investigation that a range of person, work and contextual variables be investigated and to this end it was felt measurement of most of these could be best achieved in the time which was available by way of a structured interview included within which was a job satisfaction questionnaire.

(a) Job Satisfaction Questionnaire

As has already been mentioned the measurement of work variables such as pay and supervision in the context of absenteeism has tended to ignore the perceptions of the employees; rather they have been based on judgements of "experts". In order to overcome this criticism it was proposed that some measure of job satisfaction be used which would give various sub-scores on variables such as pay and supervision. Such an approach was also aimed at providing further information on the relationship between overall satisfaction and absence behaviour.

There seems to be little doubt that the Job Descriptive Index (J.D.I.), developed by Smith, Kendal and Hulin (1969), is one of the better measures of job satisfaction available today. However, as Cross (1973) pointed out it suffers from a number of disadvantages;

(1) There is a distinct possibility of an American cultural bias in a number of the items.

(2) The items may be primarily eliciting socially desirable responses.

(3) The scales themselves are not perfectly balanced with equal numbers of positively and negatively keyed items to control for acquiescence of response set.

(4) Certain questions may be partly redundant since some items appear to be virtually synonomous with each other.

(5) The scale was designed to be used across all levels of employees in an organisation. Thus it sacrifices precision within one level for generality of application.

In order to overcome these disadvantages Cross (1973) developed the Workers Opinion Survey (W.O.S.) which is similar to the J.D.I. but standardised on a British population of shop-floor workers. In addition to the five sub-scales comprising the J.D.I. (pay, opportunities, job, supervision, co-workers) it has an extra one which measures satisfaction with the firm as a whole. The questionnaire was standardised on a sample of 431 workers from five manufacturing plants and cross-validated on 114 workers from a local council. Cross (1973) presented evidence to show that the scales are internally reliable, relatively free from response set bias and are acceptable to workers in a wide range of working environments. Evidence on the validity of the scales was also reported. The average time for its completion is six to eight minutes. Thus it can be incorporated into a longer questionnaire or used with other measures. On the basis of these findings the W.O.S. was used to measure the relationship between attitudes relating to - Pay, Opportunities, Job Itself, Supervision, Co-Workers and the Firm as a whole, and the dependent variable. It was anticipated that only slight modifications might be necessary. It was proposed that the W.O.S.'s be completed individually in the presence of the interviewer. This approach lessens spurious answers and misunderstandings and should establish good rapport which would be very necessary for the interview schedule which was to follow.

(b) Interview Schedule

As has already been indicated very little research has attempted to ascertain the reasons for absence by asking the absentee himself. This is hardly surprising when one considers the threatening nature such an investigation might appear to have for the employee. The likelihood of obtaining misleading information seems rather high. Froggatt (1970a) had little success.

> "Asking personnel the 'cause' of their short term absence - as tried in pilot interviews produced many patently spurious answers and bred antagonism ..." (P210)

In spite of this the author felt that an attempt must be made to find the causes of absence if anything constructive was to come out of the investigation, particularly in respect to the contextual variables that may be affecting absence behaviour.

Prior to approaching an organisation a number of obvious areas of enquiry were identified and a draft questionnaire was developed. It was assumed that further areas of inquiry would suggest themselves and/or be suggested upon preliminary investigation and discussions within an interested company and that these would be included with due consideration to the time factor. This approach thus helped to overcome some of the problems already referred to relating to the choice of independent variables and also ensured that the company concerned felt they would be gaining some possible benefit from the study.

A further advantage of having an interview schedule was that information on person variables could be obtained thus saving a great deal of time and providing more accurate and

up-to-date information than personnel files on a number of the variables (e.g. marital status).

It was anticipated that any additional information relating to the independent variables would be gained directly from company personnel and records.

3.2 RESEARCH SETTINGS

The organisation to be used in the research had to meet a number of prerequisites, the main ones being:

(1) It should employ a relatively large number of male blue-collar workers.

(2) It should have reasonably detailed personnel and absence records.

(3) It should be relatively free of industrial trouble.

(4) The union should agree in principle to such a study.

(5) There should be a suitable place for interviews to be conducted.

(6) Finally above all else there should be a willingness to provide the extensive cooperation that would be required.

Considerable difficulty was experienced in locating a firm which met these prerequisites. The major barrier was the lack of absence records. This probably is one of the reasons for the lack of research on absence in New Zealand. Relatively few organisations appeared to keep absence records, let alone absence records in a form that would be useful to a researcher. This automatically placed severe restrictions on the number of organisations which could be approached if the author was to avoid the very time consuming task of examining

pay sheets or the like for each individual for each week over a specified time period. However, finally an organisation of the type required was found in Firm A.

3.2.1 Firm A

(a) General Description

The firm is a relatively large manufacturing unit employing approximately 340 males blue collar employees. The bulk of the manufacturing is a twenty-four hours a day, seven days a week operation involving basically two departments C and H, which employ the majority of the blue-collar employees. The remainder of the blue-collar employees are employed for normal working hours and act in support roles such as maintenance, stores, etc.

Both department C and H have four shift crews (A,B,C,D) operating on a rotational shift system, as detailed in Appendix A. In the case of department H, the crew consists of a supervisor, foreman and general workers and in department C, foreman, leading hands and workers. The supervisor in department H assumes overall control of both departments. Department H is concerned with the actual manufacturing process whereas C is primarily concerned with quality control and packing. The work in both departments can best be described as repetitive, paced and noisy, and also hot in the case of department H.[1]

The average monthly turnover for all non-salaried male employees for the entire firm for the period January to July 1976 inclusive was 18.71%. Although no departmental figures are kept it is evident from an examination of the manning

1. The company's desire for anonymity restricted the description of the job.

analysis that department C contributes significantly to this figure. According to the manning analysis for the week ending 1st August the total number of non-salaried male blue collar workers on shift crews A, B, C and D was eighty-two, twenty of whom had been employed for less than a month.

Although no departmental figures are kept, absence levels within department H and in particular department C were considered to be high and because of the continuous nature of the operation were viewed with concern. This being the case it was agreed that the study focus its attention on department C and use department H for pretesting purposes.

(b) Absence Policy

The company has a personnel procedure which deals with absenteeism (Appendix B). Emphasis is placed on establishing bona-fide reasons for absence and encouraging the employee to provide prior notification. A further section is devoted to monitoring and controlling absence. There are no comments on entitlements, e.g. bereavement leave, sick leave, etc. nor are there any details on the attendance bonus scheme which is in operation. The award on the other hand proves to be more illuminating and a copy of the relevant sections is included in Appendix C.

There is no formal induction procedure for new employees and the only detailed information a new employee is given concerning the company's absence policy consists of a sheet of paper which deals with the prior notification of absence (See Appendix D).

The communication of the company's absence policy to those directly involved in monitoring and controlling absence appears to be equally minimal. The most recent communication on the subject deals with establishing whether the absence was approved or not (see Appendix E).

(c) Absence Measurement

A weekly manning analysis was introduced several years ago in order to measure absence levels throughout the company. This weekly manning analysis is now used for a variety of additional purposes, including staff payment calculations, safety statistics and general accounting purposes.

Each week the foreman or supervisor of each shift crew in departments C and H completes a day by day manning analysis for his crew. In theory the following classifications are adopted.

	Code
Absence due to Accident	ACC
Sick Leave	SL
Special Leave (LWOP, Bereavement)	SP
Annual Leave	AL
Statutory Holiday	ST
Any other Absence	A

Where there has been no absence the number of hours worked for that day is entered. The registers are then passed onto the Accounts Department via the Personnel Department. Once a month the Personnel Department randomly selects a week for that month for absence analysis. The analysis consists of

calculating the total lost time due to approved and unapproved absence. These figures are then passed onto management for their perusal.

Preliminary investigations revealed that the classificatory system is rarely used, most foremen adopting their own systems. The trend however is to classify according to whether prior advice was given concerning an intended absence. This is in keeping with the emphasis the company places in prior notification. Thus weekly manning analysis sheets show A/A (absence advised) or A (absent) whatever the reasons, or the hours worked. The only other classification used is AL (annual leave). It is from such systems that the absence analysis is made. Those absences classified as A/A are considered approved and those classified as A considered unapproved. This assumes then that all the instances of A/A are approved but clearly there would be many cases where this would not be the case. Thus the absence analysis becomes very unreliable if not meaningless and at best only a total absence figure may be extracted which reflects all absences other than annual leave or statutory holidays.

The literature review has indicated that total absence figures such as this can be used to provide a good indicator of voluntary absence and this appears to be the case here. For instance absences due to accidents are minimal as it is only in the very extreme cases that employees do not attend work, with the usual practice being to engage them on light duties. Also long term sickness involving hospitalisation is usually noted on the manning analysis and thus can be omitted from the total absence figure. It seems reasonable to suggest that absence due to bereavement leave would also be minimal.

3.2.2 Firm B

Because of the small number that were interviewed in Firm A a second firm was approached. In order to minimise methodological difficulties and complications with the treatment of results an attempt was made to find a firm which had a population or sub-population exhibiting essentially the same characteristics as those of Firm A. In particular, it was desirable that the second population be of blue-collar employees and involved in a twenty-four hour seven day a week operation on a rotational shift basis.

Investigations revealed that the number of potential populations was small. A great deal of difficulty was experienced in trying to enlist the cooperation of a firm which had the necessary prerequisites. Although a number of organisations expressed an 'interest' none were prepared to allow their employees the half hour off for the interviews, all arguing that this would affect production. After two months it became clear that a compromise would have to be accepted and this was found in Firm B.

(a) General Description

This firm is a large manufacturing unit employing approximately 440 male blue collar workers, the majority of whom work normal hours. Preliminary investigations established that the sub-population which was closest to resembling that in department C of firm A was Department K.

Department K employed a total of fifty, thirty eight of whom were permanent day workers (two were female) and twelve being permanent night workers. There were essentially two

positions within the department, namely, operator and mechanic. The operator's work is repetitive, paced and noisy whilst the mechanic's could be described as repetitive and noisy[1]. There is only one supervisor and he is responsible for the day-to-day running of the department. Although no labour turnover figures were available for department K there were figures for the division within which it operated. For the period 5th June 1975 to 26th May 1976 labour turnover for this division was 43.5%. However, it would appear that Department K's contribution to that figure was low, prior investigations revealing that there was only one individual who had been with the company for less than a month. In terms of labour turnover Department K had a markedly lower labour turnover than Department C of Firm A. Although there were no absence statistics, the firm considered absence levels within department K to be relatively low. However, in absolute terms the supervisor considered the levels high and expressed a desire to come to a better understanding of his subordinates' absence behaviours.

(b) Absence Policy

The firm has no formal absence policy. The administration of all absence matters is left entirely in the hands of the supervisor of each department who is encouraged to use his own discretion. This discretion depends on production and labour turnover levels. The impression gained by the author is that the firm provides considerably more lee-way in some absence matters (e.g. funerals) than is provided for in the award, (see Appendix H for relevant sections). Within all departments

1. The company's desire for anonymity restricted the description of the job.

it is normal procedure for the supervisor to seek an explanation for any absences that occur. In those instances where unsatisfactory explanations are provided, verbal warnings are given and the opportunity to work overtime for the next week is forfeited.

The firm does not keep absence statistics as such. However, each week the number of hours worked by each individual is recorded on individual files. Also included on this file is a record of all payments made for annual leave, sick leave etc. for each week. Thus it was possible to extract absence levels for each individual.

3.3 RESEARCH SAMPLES

3.3.1 Firm A

An attempt was made to interview every non-salaried employee from each shift in department C who had worked for at least a month. This qualifying period was chosen for the following reasons;

(1) Any shorter period could have grossly distorted some individuals' absence rates.

(2) A number of the questions were directly or indirectly related to the various shifts and it required a month's service before an employee had been on all four shifts and thus would be in a position to answer them.

(3) It was felt that to administer the W.O.S. to an employee of less than one month's service would invite too many "not sure" responses.

In the context of (2) it could be argued that a longer period of employment should have been allowed. However, any longer period would have severely reduced the number of employees eligible to take part in the survey (approximately sixty), particularly when one considers that there would be employees who refused to cooperate, were on annual leave or were absent. General demographic details of the sample are given in the results chapter. It will suffice here to note that the sample was relatively young, approximately half was married, and the majority were pakehas.

In view of the response during pretesting, a reasonably high response rate was expected.

3.3.2 Firm B

An attempt was made to interview all the permanent day workers within department K who had one month's service or more. The two females were excluded as the study was concerned solely with males. The night shift was excluded because five of the permanent night workers were Polynesian and in view of the problems experienced with Polynesians in Firm A it was considered expedient to exclude them. Furthermore it was felt that the complications involved in treating results for, at best, the remaining seven were not warranted, and so they were also excluded. This left a total of thirty-six employees who could be interviewed. With one exception they were all pakehas, the majority of whom were married, and they tended to be older than the sample from Firm A (detailed demographic details are given in the Results chapter).

3.4 INTERVIEWS

3.4.1 Pretesting

All pretesting took place in department H of Firm A for the following reasons;

(1) At the time of pretesting it was envisaged that the study would be based solely on Department C of Firm A.

(2) The type of work in this department was similar to that in department C.

(3) It was the only major department which operated on the same shift system.

(4) As a result of (3) it was the only other department that would have employees available for interviewing after 4 p.m. (an essential prerequisite).

(5) It was the largest department next to department C and thus provided the best potential for pretesting.

(a) Development and Pretesting of the Interview Schedule

The basic strategy was to develop a structured questionnaire with open-ended questions. Taking some of the variables that had already been reviewed as the starting point, questions were formulated bearing in mind some of the previously unexplored aspects. Further questions were added as a result of discussions with senior management, the foreman of departments H and C, personnel staff and the Union Secretary. The schedule was then pretested on twenty-six employees, with modifications and additions being made throughout. The final form adopted appears in Appendix F. Apart from the exclusion of the questions relating to shift work and minor modifications to the wording of some questions

the questionnaire was essentially the same as that used in Firm A.

In the early stages of pretesting it was established that rarely was there a single reason for a particular instance of absence. Moreover in those cases where the cause was considered to be a single factor, most interviewees, with the exception of those with a relatively short length of service, had difficulty in remembering exactly how many times they had been absent for a specific reason. This being the case any attempt to ascertain exactly how much of the total absence was attributable to one particular cause seemed futile. This meant that at best all one could expect was a very rough indication by means of a rating such as that finally adopted (Appendix F). In those cases where interviewees could remember exactly how many times they had been absent for a specific reason it was recorded, thus providing some indication of the variability in ratings.

(b) Pretesting W.O.S.

Concurrent with the pretesting of the interview schedule the W.O.S. was administered in its original form. No major difficulties were encountered and the original format as laid out by Denys Cross (1973), with only a minor modification to its introduction and the addition of a university letterhead, was adopted (see Appendix G).

(c) Response Rate

The response rate was 100%, twenty-six employees being approached and twenty-six cooperating. There were two instances where doubts were expressed concerning the interviewer's independence in relation to the firm, but it was felt that these were allayed satisfactorily. Apart from these two instances no-one else expressed concern about their anonymity and indeed a number made it quite clear that they did not care who saw what they said.

(d) Recruitment Problems

The nature of the manufacturing process in Firm A was such that the machines had to be manned continuously. This presented problems in terms of recruiting interviewees, problems which were aggravated when other employees were absent. A further barrier was the need for the supervisor to "stand in" for an interviewee in a number of cases. In addition it should be realised that since this was a pretest the department was not going to obtain anything in return for their assistance. The end result of these problems was that on several visits no interviews were able to be conducted and that in the end only twenty-six people were used for pretesting the W.O.S. and the Interview Schedule.

3.4.2 Interview Procedure

Firm A

(a) Introduction of Study to Employees

Pretesting within department H had established that an informal casual approach was the most satisfactory method of introducing the study. This was achieved as follows. Each

interviewee was introduced to the author. After a very brief explanation on the part of the foreman as to who the author was the employee was then taken aside from his workplace and the nature of the investigation and what was required of him were explained. It was made very clear that the author was from the University and was carrying out an investigation on absence from work as partial fulfilment of the requirements for a thesis. It was pointed out to the interviewees that their employer was approached with a view to using the organisation as the basis of the study and that they had agreed to help. Emphasis was placed on the fact that the firm was approached by the author and the firm had not initiated this study in any way. It was mentioned that the Union had given its approval and in fact in the case of Firm A the Union Secretary had offered the use of his office for interviewing purposes. The interviewee was told that department C had been selected as the basis for the study and that an attempt was being made to interview everyone in it who had been there for one month or more and in this respect his cooperation would be appreciated. He was told that his name would be required but that this was purely to help with the analysis of the data and that anything he said would be treated with the strictest of confidence. He was informed that the company would receive a report on the study but there would be nothing in it which would lead to the identification of himself or his co-worker. An example was given of a typical summary statement that the company would be receiving (e.g. 60% said and 40% said).

If an employee agreed to participate he was then asked to accompany the author to the Union Secretary's office where the interview would take place. Whilst walking from the job to the office questions about the study were answered and where any doubts about the author's connection arose attempts were made to allay them. In those cases where the individual showed a relatively high degree of interest in the study more time was taken to explain the nature of the study. Provided there were no questions light-hearted conversation was engaged upon. By the time the interview room had been reached a reasonable amount of rapport had usually been established.

Whilst interviewing the first crew it was noticed that as the number of employees who had been interviewed increased, cooperation became more forthcoming. This was probably a result of two factors. It seems highly likely that the crew as a whole established fairly early whether the investigator seemed genuine. Secondly, as the numbers interviewed increased it became more and more obvious that no-one was being singled out to be interviewed. These points were capitalised on, in interviewing the remaining three crews, by approaching those employees who the foreman felt were most likely to cooperate first, leaving those that he felt least likely to cooperate to the end.

(b) Interviewer's Appearance

Since the subject matter considered behaviour in a sensitive area particular care was taken not to arouse any false suspicions that the interviewee may have had concerning

the interviewer's connection with the firm. In this respect attire and general appearance were felt to be important. The interviewer had long hair, beard, wore jeans etc., thus projecting a university student image and hopefully helping to establish credibility.

(c) Administration of W.O.S. and Interview Schedule

Upon entering the interview room the interviewee was invited to take a seat and the interviewer sat adjacent on the same side of the desk. The W.O.S. was introduced, the introduction being read through by the interviewer. An example was given of what was required and then the interviewee was allowed to complete the questionnaire by himself. If he had any difficulties in understanding what was meant by a phrase or a word, elaborations were given, particular care being taken not to embarrass him. If the interviewee was having too much difficulty the interviewer went through each question giving examples as necessary. After the interviewee had finished the W.O.S. he was asked if he had any questions. Providing the session had progressed satisfactorily the interview schedule was then introduced. Time was taken to emphasise once again (although not unduly) that the interviewer was independent of the company and that the interviewee's answers would be treated with the strictest confidence. Furthermore he was told that if he did not wish to answer any of the questions he should say so without hesitation. In those cases where the interviewee had worked for the company on some other separate occasion he was asked to relate his replies to the present period. Where an employee had transferred from another department to Department C he was asked to reply purely with

reference to Department C. The schedule was then read through.

After the schedule was completed interviewees were debriefed and questions were encouraged as was any other conversation. Each interviewee was asked if he was unhappy about any aspects of the session. The interviewer then walked back with the employee to his job and approached another employee.

(d) Place and Time of Interviews

The interviews were held in company time and of necessity administered using company facilities. In deciding upon a place where to interview several factors had to be taken into account in order to reduce as much as possible any undesirable demand characteristics a location may have. For example, board, conference or interview rooms may have conjured up anxieties as a result of past associations. An attempt was made to find a neutral setting which would not be associated with employment testing, management or authority features of the company. This however, proved fruitless. Fortunately the Union Secretary offered his room and this offer was finally accepted. Whilst it could not be considered "neutral" it was felt that there would be relatively few if any situations where it would have an undesirable effect on the interview. Indeed it was felt that it could increase the author's credibility and help rapport in most cases. The office was located in a central position on the site and was modestly furnished. This meant that an employee could come to the interview without changing or washing and that no-one would feel apologetic for his attire or manner. One of the walls displayed a candid photography which seemed to attract comments and thus helped create a friendly and relaxed atmosphere.

The use of the room was confined to 4 p.m. onwards. This had the advantage that members of management were not on site and the chances of interruption would be minimal. This naturally meant that all interviewees had to be seen whilst they were on afternoon shift.

There was a need to continuously man machinery in department C and in view of the problems experienced in obtaining employees for interviews in department H, interviews were planned to coincide with times when machines were out of operation. Fortunately there was a two-week period when one of the machines was not operational and an attempt was made to conduct all the interviews over this period. Unfortunately only the eligible members of three crews, B, C and D, were interviewed during this period. The members of crew A were unable to be interviewed as eight had left on the first week interviewing was to take place, leaving the crew extremely short of experienced labour. Subsequent to this two-week period further complications arose with the introduction of a sixth machine, thus increasing the number of experienced men that would be required to be at hand at all times. After approximately one month's delay the employees of this shift were able to be interviewed.

Firm B

The procedures adopted in the administering of the W.O.S. and the interview schedule were exactly the same as those used in Firm A.

Unfortunately a neutral interviewing 'setting' could not be found and a room within the personnel department had to be used. Fortunately this was at the extreme end of the building and access to it did not require walking through the department. A further pilot study was not conducted mainly because there were no other suitable sub-populations within the firm. Furthermore it was felt that since the W.O.S. and the interview schedule had already been used with forty-six interviewees without any major difficulties a pilot study was probably unnecessary. The interviewing took place during normal working hours and was completed in a week.

3.4.3 Scoring of W.O.S.

The scoring method adopted was that advocated by Cross (1973), namely:

Response	Weight
'yes' to a positive item	3
'no' to a negative item	3
'not sure' to any item	1
'yes' to a negative item	0
'no' to a positive item	0

From these scores a total satisfaction score was obtained along with sub-scores for each of the dimensions for each individual.

3.4.4 Response Rates

Firm A

The number of those employees with one month's service or more in each of the crews at the time of interviewing is given below along with the number of employees actually interviewed.

Crew	> 1 Mth Service	Interviewed
A	10	8
B	15	12
C	16	10
D	17	16
Total	58	46

These figures represent a 79% response rate, which is lower than that achieved during pretesting. This occurred for a variety of reasons.

The small number eligible to be interviewed in crew A was a direct result of the high labour turnover that occurred around the time of the interviews. Of the ten eligible to be interviewed, one was absent on the three occasions interviews took place and another declined to participate. Within crew B one employee was unable to be interviewed because of his difficulty in understanding English, another declined to be interviewed and a third was absent. Crew C had one employee on annual leave and another absent, four others declined to participate.

All four refusals in Crew C came from Maoris or South Pacific Islanders. The first Maori who was approached was very suspicious and refused to cooperate even after attempts were made to allay his fears. The second Maori indicated his willingness to cooperate but after completing half the W.O.S. declined to continue. The effect of these two refusals, in particular the second one, appeared to affect the two Samoans who refused point blank to participate. These refusals

did not affect the cooperation of the pakehas on this shift. One of the other two refusals (of a total of six) also came from a Polynesian.

At this stage it was felt preferable that the number of research subjects should be increased. The only department within Company A in which it would have been feasible to carry out further interviews was Department H. However, in view of the fact that pretesting had taken place there and considerable problems had been experienced in obtaining interviewees, any ideas of using this department were quickly abandoned. This meant that a second organisation had to be approached.

Firm B

All 36 employees were approached. Only one person refused to participate. One interview had to be abandoned because the subject had difficulty speaking English. This represented a response rate of 94%.

3.5 ABSENCE MEASUREMENT

3.5.1 Firm A

Ideally it would have been preferable to measure the absence of all personnel over exactly the same period (e.g. 6 months) but the high labour turnover in department C meant that this was not a practical approach. Instead, total absence was measured for all individuals from the time of the interview back as far as the 1st January 1976 or their starting date within the department, whichever came first. This meant that absence could be measured for the entire period of

employment to date for approximately forty of the sixty odd employees who qualified to be interviewed. (These figures are based on the manning analysis for the week ending the 1st August and thus assume that labour turnover would remain relatively constant in the ensuing months). It was felt that the measurement of absence for a period of at least eight months for the remaining twenty employees would provide a good indicator of their absence behaviour. A further search back in time for a decreasing number of people was felt to be unwarranted.

The total number of days lost for all reasons other than annual leave, and long term sickness (five days) was calculated for each individual. Instances of long term sickness (five days or greater) were ignored as it was assumed that they were genuine. This approach also avoided the confounding of absence with labour turnover. Any instance of absence less than four hours was ignored and any absence greater than or equal to four hours on any one day was treated as a one day absence. The following indices were then calculated for each individual;

$$\text{Frequency Index (F.I.)} = \frac{\text{No Instances of Absence}}{\text{No Working Weeks}} \times 100$$

$$\text{Percent Lost Time Index (L.T.I.)} = \frac{\text{No Days of Absence}}{\text{No Working Days}} \times 100.$$

If there was a case where an instance of absence was immediately followed by a rostered day/s off which in turn was immediately followed by 'another instance' of absence the 'two

instances' were treated as one absence.

3.5.2 Firm B

The methods adopted here were exactly the same as those used in Firm A.

CHAPTER 4

RESULTS

4.1 OVERALL ABSENCE LEVELS

Individual frequency indices and lost time indices of absence were calculated for each individual. Figs 1 and 2 represent the respective distributions of the eighty subjects. Fig. 3, 4 show the distributions for each company separately.

4.2 ANALYSIS OF RESULTS

Because of the shape of the absence distributions and the variety of distributions exhibited by the independent variables a non-parametric statistic, the contingency coefficient, was used in summarizing the relationships between dependent and independent variables.

In all instances, unless stated otherwise, the first analysis consisted of constructing a 2 x 2 contingency table. Individuals were then categorised according to whether they were high or low on the dependent variable and then further categorised according to whether they were high or low on the independent variable. In both cases the median (or very close to it) was used to classify individuals in 'high' or 'low' groups. For the dependent variable the actual classifications were as follows:

High Absence: FI $\geq$ 15 (n = 40)

LTI $\geq$ 5% (n = 38)

Low Absence: FI $\leq$ 14 (n = 40)

LTI $\leq$ 4% (n = 42).

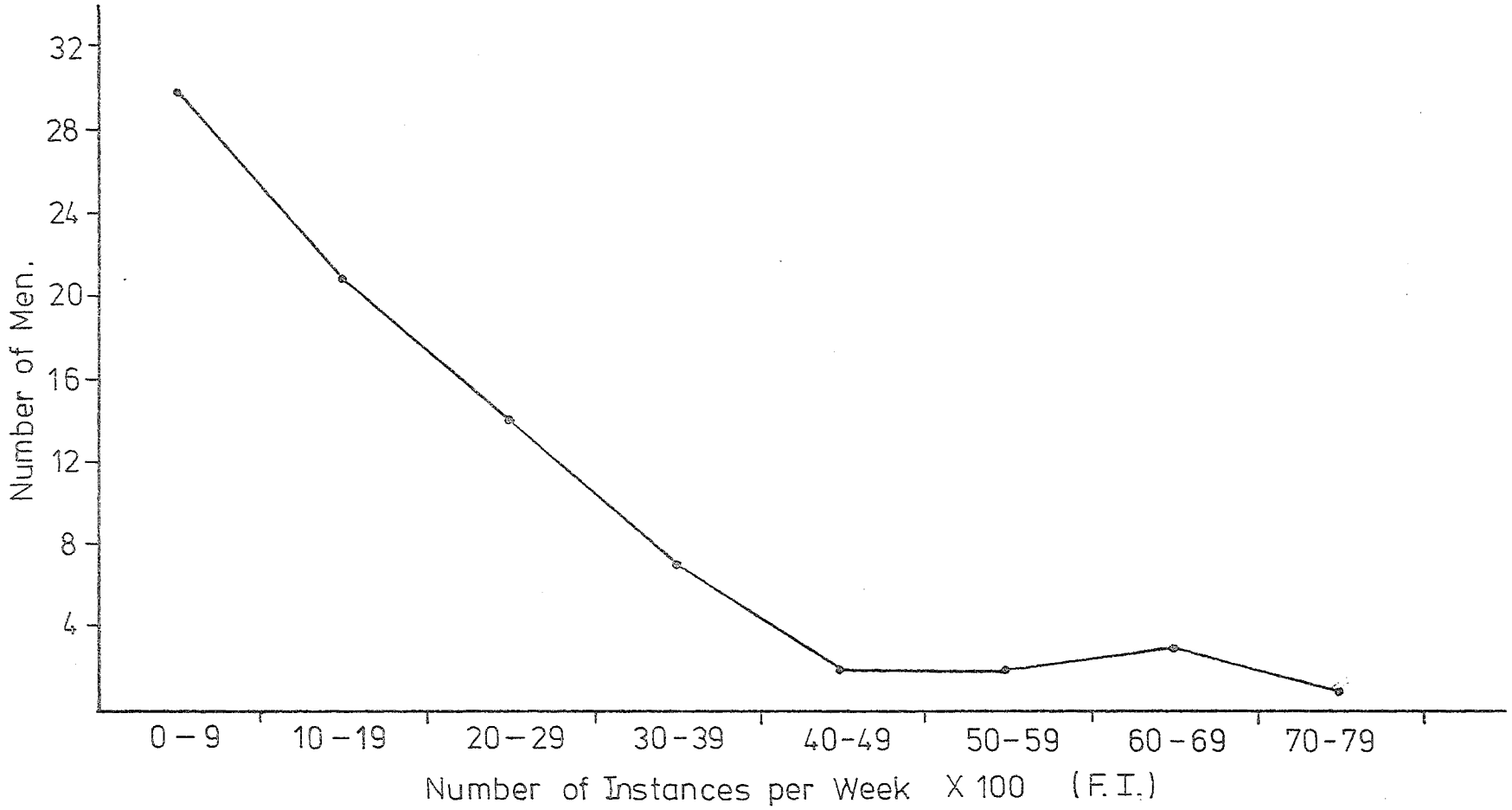

FIG. 1 Absence Distribution – Firms A + B

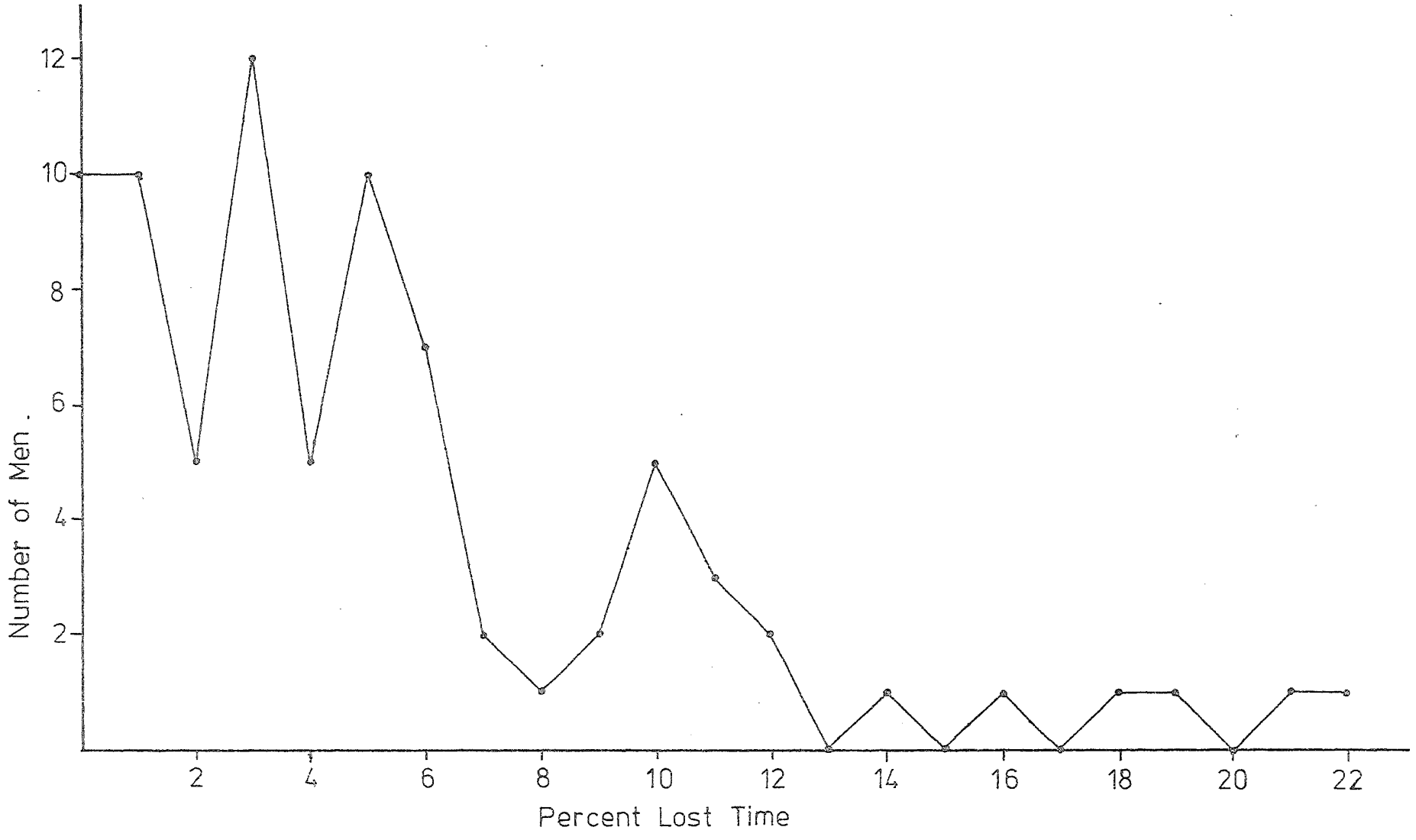

FIG. 2 Absence Distribution – Firms A + B

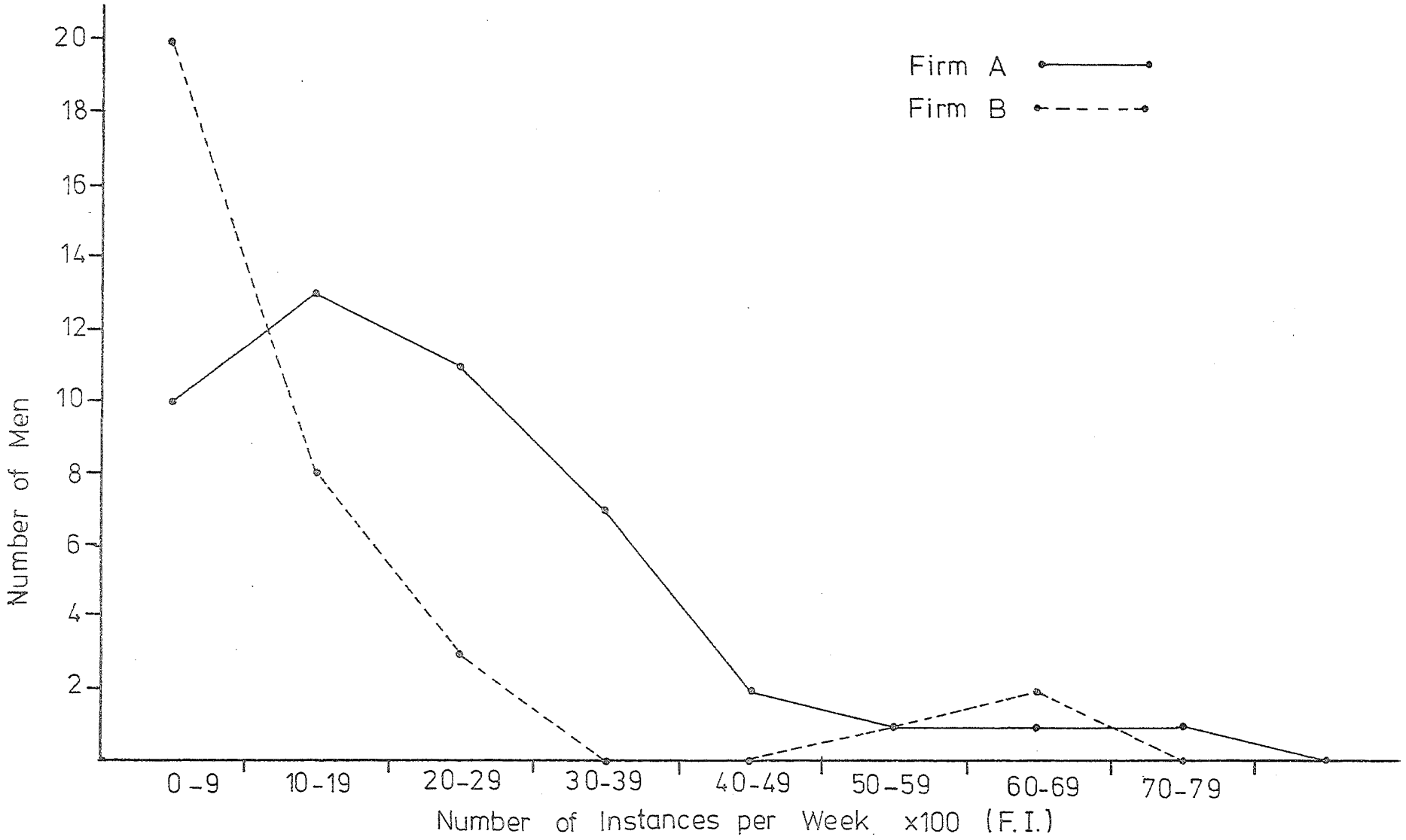

FIG. 3 Absence Distribution — Individual Firms.

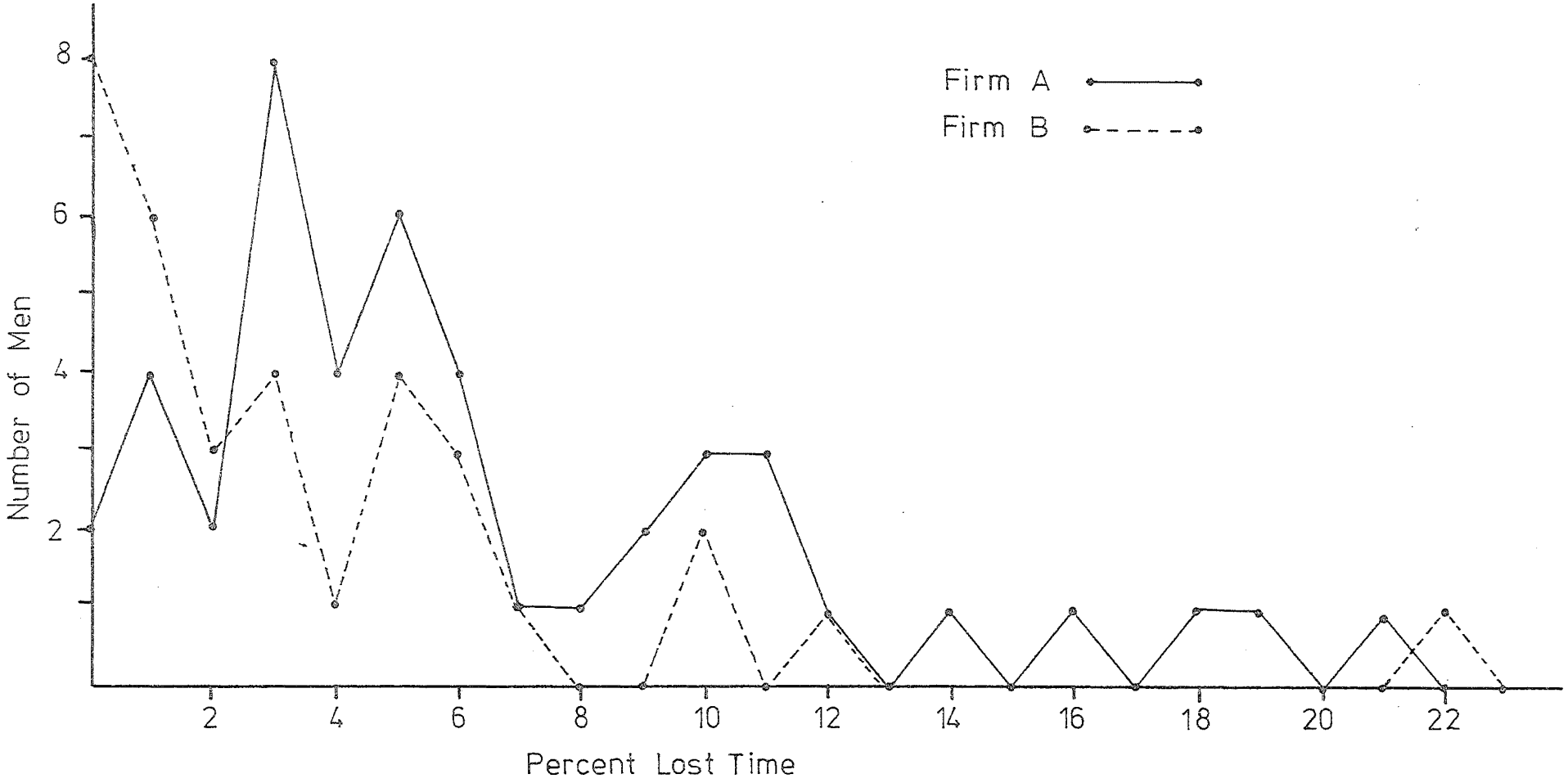

FIG. 4 Absence Distribution — Individual Firms

A chi square was then calculated from the table, Yates correction being applied in those cases where expected frequencies were less than 10. Where the chi square proved significant contingency coefficients were then calculated. It should be noted that the upper limit of C for a 2 x 2 table is 0.707.

4.3 ABSENCE IN EACH FIRM

Table 1 gives a break down of the absence figures for Firms A and B.

Table 1

	No. Subjects	No. Possible Work Days	No. Days Lost	% LT	No. Instances	Av. time of each inst. (days)
Firm A	46	5705	378	6.62	246	1.54
Firm B	34	6480	198	2.99	117	1.66

Individuals in each firm were categorised according to whether they had a high or low absence on both absence measures. Using the FI the results of this categorisation showed that 65% of the subjects in Firm A had a high absence whereas only 29% of these in Firm B had. Subsequent analysis revealed that this was a significant difference ($C = 0.33$ $\chi^2 = 10.02$ 1df $0.01 > p > 0.001$). Although the categorisation using the LTI showed a similar relationship, namely a greater percentage in Firm A having high levels of absence, the difference was not significant (χ^2 3.27 1df).

4.4 AGE

Fig. 5 shows the age distribution of all interviewees in Firms A and B. Although no comparable age groups are kept by the Labour Department an examination of the most recent statistics shows that 46% of the entire male work force was 34 years of age or under in 1971 (N.Z. Year Book 1975, P848). The equivalent figure in this instance was 63%, i.e. considerably higher. Table 2 shows that Firm A had a large percentage, 67%, that were 34 or under; the equivalent figure for Firm B was 56%. On the strength of this employees were categorised first by firm and second by whether they were 'young' ($\leqslant$ 28 yrs) or 'old' ($\geqslant$ 29 yrs). This categorisation failed to show any significant differences between the Firms (χ^2 = 0.82 1df).

The Labour Department figures suggest that the age distribution of all the interviewees is atypical of male work groups in general. Note though that this does not necessarily mean that they are atypical of male blue collar work groups engaged in manufacturing industry during 1976.

The absence rates of the 'young' ($\leqslant$ 28 yrs) were compared with those of the 'old' ($\geqslant$ 29 yrs) by means of contingency tables. Using the FI of absence, 71% of the young had a high absence rate and 74% of the old had a low absence rate. Using the LTI of absence the respective percentages were 61 and 68. Both of these results proved significant.

FI: $C = 0.31 \quad \chi^2 = 8.66 \quad 1df \quad 0.01 > p > 0.001$

LTI: $C = 0.28 \quad \chi^2 = 7.24 \quad 1df \quad 0.01 > p > 0.001.$

However in the case of individual firms the relationship held for only the frequency index measure of absence in Firm A.

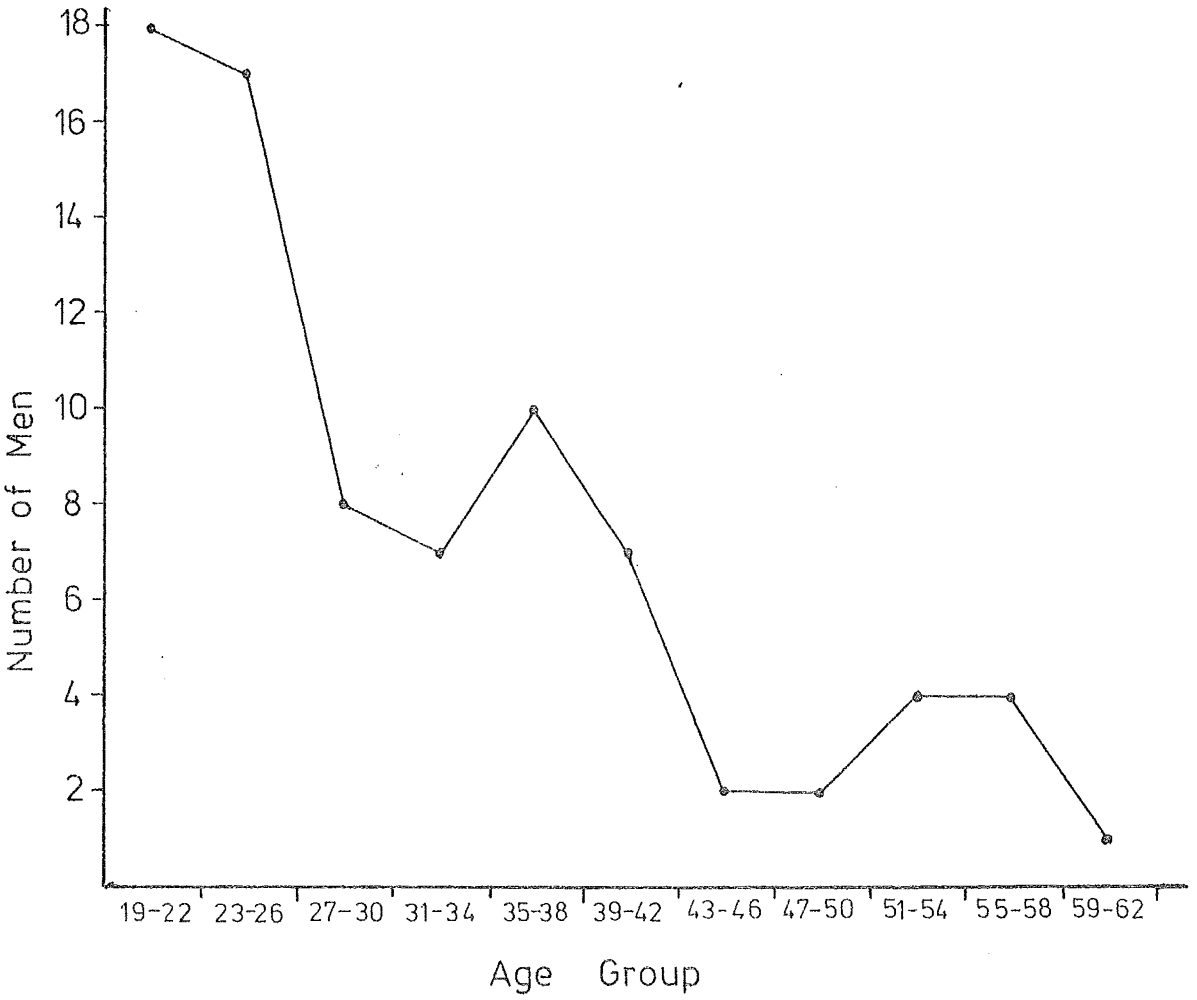

FIG. 5 Age Distribution — Firms A and B.

Table 2. Distribution of Age by Age Group and Firm

Age Group	Number of Men		
	Firm A	Firm B	Total
19-22	12	6	18
23-26	11	6	17
27-30	4	4	8
31-34	4	3	7
35-38	6	4	10
39-42	3	4	7
43-46	1	1	2
47-50	1	1	2
51-54	1	3	4
55-58	2	2	4
59-62	1	0	1
Total	46	34	80

Firm A FI: $C = 0.22$ $\chi^2 = 4.28$ 1df $0.05 > p > 0.02$

LTI: $\chi^2 = 0.37$ 1df ns

Firm B FI: $C = 0.22$ $\chi^2 = 3.69$ 1df ns

LTI: $C = 0.26$ $\chi^2 = 0.35$ 1df ns

Investigating the relationship further, age was recategorised into three divisions namely 'young' ($\leqslant 23$), 'middle-age' (24-35), 'old' ($\geqslant 36$) and its relationship with both measures of absence re-examined.

Using the FI of absence the relationship was such that 77% of the 'young' had a high level of absence, 61% of the 'middle-aged' had a low level of absence and 65% of the 'old' had low level of absence. In the case of the lost time index the pattern was very similar, the respective percentages being 65, 64 and 58. In both cases the results were significant.

FI: $C = 0.38$ $\chi^2 = 14.14$ 2df $p < 0.001$

LTI: $C = 0.24$ $\chi^2 = 5.31$ 2df $0.05 > p > 0.02$

4.5 LENGTH OF SERVICE

The length of service for each individual was recorded in years or part thereof. In view of the high numbers with a short length of service the length of service distribution was plotted using a logarithmic scale for length of service. Fig. 6, the resulting distribution, shows that half of all the interviewees had worked for one year or less at the time of interviewing. As was the case with age a disproportionate number of these were from Firm A, 70% having one year of

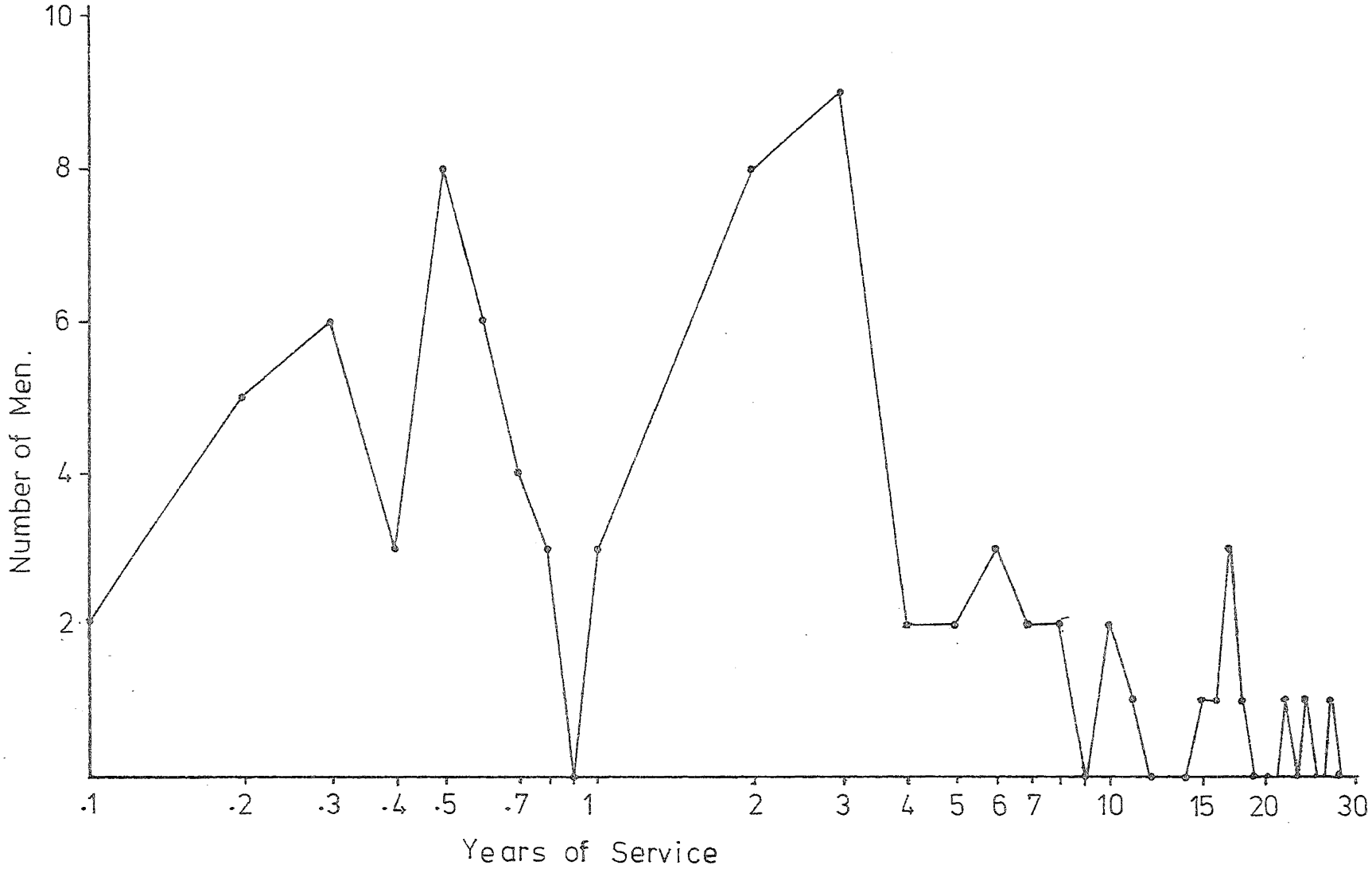

FIG. 6 Length of Service Distribution — Firms A + B

service or less. The equivalent figure for Firm B was 18%. This difference proved to be highly significant ($C = 0.44$ $\chi^2 = 20.53$ 1df $p < .001$).

The absence rates of those with a short length of service ($\leq$ 1 year) were compared with those who had a long length of service (> 1 year) by means of a 2 x 2 contingency table. In the case of the FI of absence 66% of those who had a short length of service had a high absence rate, and 64% of those who had a long length of service had a low absence level. This result proved to be significant ($C = 0.28$ $\chi^2 = 7.20$ 1df $0.01 > p > 0.001$). No such relationship was found using the LTI of absence ($\chi^2 = 1.8$ 1df n.s.)

4.6 MARITAL STATUS

Treating a divorcee as being single and a de facto relationship as a marriage, the marital status of the interviewees in each firm was as follows:

Firm A 21 married (17 with one or more dependents)
25 single

Firm B 25 married (15 with one or more dependents)
9 single.

The absence levels of single employees were compared with those of married employees by contingency tables and in both cases no significant relationships were revealed (FI: $\chi^2 = 3.28$ 1df LTI: $\chi^2 = 2.3$ 1df).

The absence levels of employees who were single, married with no dependents, and married with one or more dependents were then compared and the results were much the same (FI: $\chi^2 = 3.52$ 2df n.s. LTI: $\chi^2 = 2.11$ 2df n.s.).

4.7 WORKING WIVES

The absence rates of those males whose wives were working (n = 25) were compared with those whose wives did not work (n = 21). The results of the contingency tables were as follows; FI: $\chi^2 = 3.16$ 1df n.s., LTI: $\chi^2 = 0.35$ 1df n.s.

4.8 SICK LEAVE

The absence rates of those who qualified for sick leave on or before the 1st January 1976 (n = 39) were compared with the absence rates of those who did not qualify for sick leave at that date (n = 41). The categorisation was based solely on length of service. Using the frequency index measure of absence, the relationship was such that 64% of those who qualified for sick leave had a low absence rate and 62% of those who did not qualify for sick leave had a high rate, a result that was significant ($C = 0.26$ $\chi^2 = 6.06$ 1df $0.02 > p > 0.01$). The lost time index, as the measure of absence, failed to show any significant relationships, ($\chi^2 = 1.36$ 1df).

4.9 OVERTIME

The total hours paid for overtime from the commencement of employment, or from the 1st January 1976 (whichever came first) up to the time of interviewing was calculated for each interviewee. From this figure the mean number of hours paid for overtime per week was calculated for each individual. The relationship of this index to both measures of absence was then

examined. In the case of the FI of absence: 63% of those who were categorised as having a high overtime index ($\geq$ 6 hrs/week) had a low absence rate and 62% of those categorised as having a low overtime index ($\leq$ 5 hrs/week) had a high absence rate. Subsequent analysis showed that this result was significant ($C = 0.24 \quad \chi^2 = 5.02 \quad 1df \quad 0.05 > p > 0.02$). However, the LTI of absence failed to show any significant relationship with overtime ($\chi^2 = 3.02 \quad 1df$).

Treating each firm's figures separately and using only the FI measure of absence a very similar result to that already demonstrated was found in Firm A, namely 65% of those who were categorised as having a high overtime rate ($\geq$ 3 hrs/week) had a low absence rate and 65% of those who were categorised as having a low overtime rate ($\leq$ 2 hrs/week) had a high absence rate.

4.10 DAILY VARIATIONS - FIRM A

Unfortunately only Firm A had absence records that allowed the extraction of daily absence rates. Fig. 7 shows the distribution of the 378 days of absence by day of the week and shift.

The graph shows that there is a relatively high level of absence on or near weekends, irrespective of shift. Moreover, the highest level of absence occurs on Saturday of the night shift. A further notable feature of the graph is that the pay days (Wednesday for day, night and swing shifts and Tuesday for the afternoon shift) have some of the lowest levels of absence.

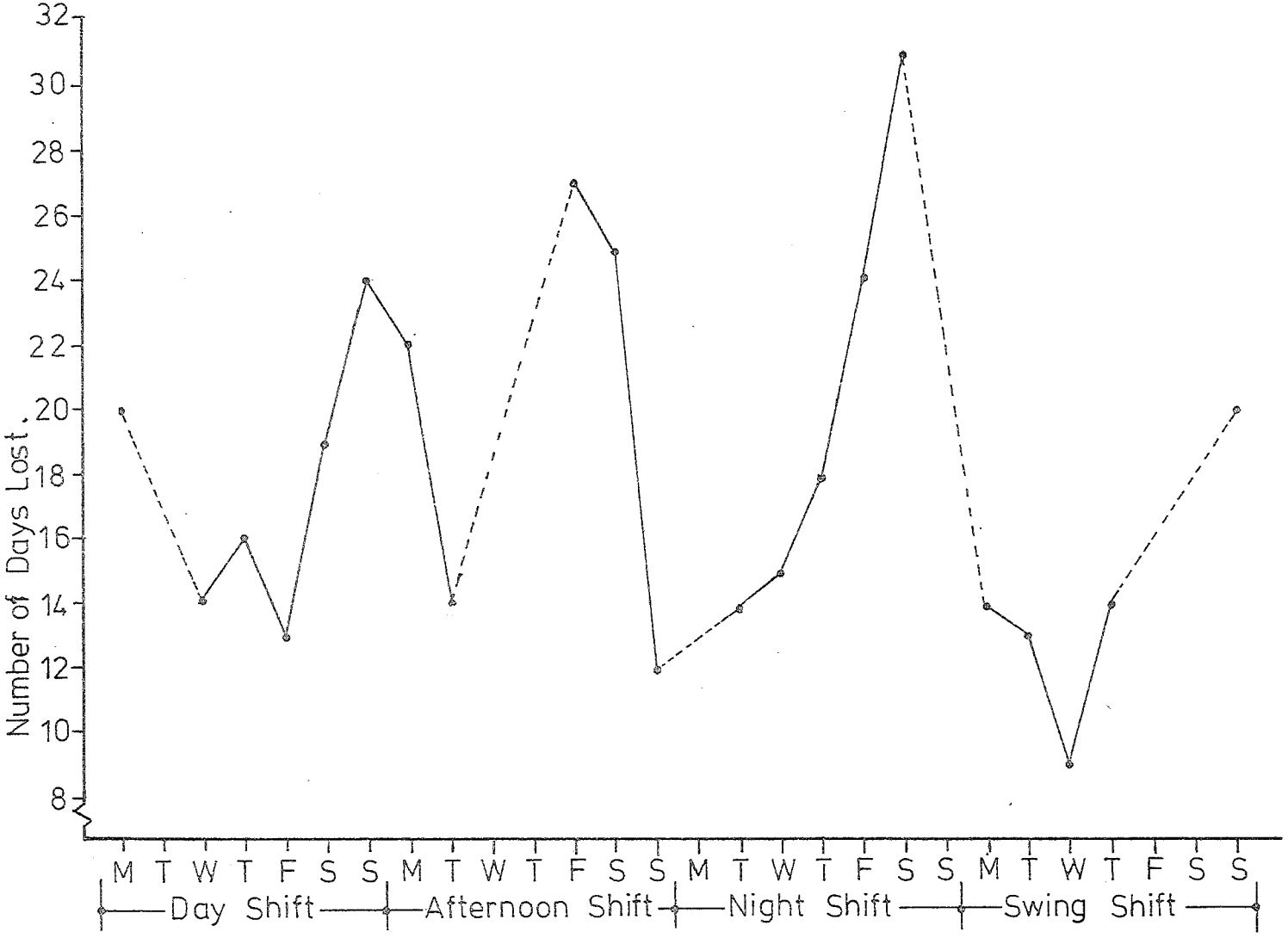

FIG. 7 Daily Variations in Absence —— Firm A.

4.11 W.O.S.

Using the 2 x 2 contingency tables, each interviewee was categorised according to the criteria outlined previously. The resulting Chi squares from these contingency tables are summarised in Table 3. None of these proved significant.

Table 3: Absence and Satisfaction - summary of Chi squares (all 1df) by Satisfaction Scale and Absence Measure.

WOS Scale	Absence Measure	
	FI	LTI
Firm	0.05	0.20
Pay	0.05	0.20
Promotion	0.20	0.82
Job	0.76	0.80
Co-workers	1.22	1.46
Total	0.20	0.80

4.12 INTERVIEW SCHEDULE

The results of the interview schedule follow. The replies to questions 32 and 33 (see Appendix F) have been combined where possible with the one or more of the previous questions. Where possible chi squares have been used to examine differences between the firms. In a number of instances chi squares have not been calculated because there were obviously no differences or the cell expected frequencies were less than five (McNemar 1969). Unfortunately in the latter case the only alternative statistic, the Fisher Exact Probability Test, was not suitable as the use of this test requires that the two independent samples be small in size (Siegel 1956 P96).

Q1 Have you ever been absent from work because of a work related accident?

	YES	NO
Firm A	5(11%)	41
Firm B	1(3%)	33
Totals	6(8%)	74

Q2 Have you ever been absent so you could attend a funeral?

	YES	NO	
Firm A	13(28%)	33	(χ^2 = 1.41, n.s.)
Firm B	14(41%)	20	
Totals	27(34%)	53	

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly Ever
Totals	-	-	7	20

Q3 Have you ever been absent from work because of family sickness?

	YES	NO	
Firm A	14(30%)	32	(χ^2 = 1.87, n.s.)
Firm B	5(15%)	29	
Totals	19(24%)	61	

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	12	5	2	-

Who was sick last time?

Without exception single interviewees mentioned their mother whereas the most frequently mentioned person for the married interviewees was their wife.

Q4 Have you ever been absent from work so you could attend to important business matters (e.g. Lawyer etc.)?

	YES	NO	DK	
Firm A	15(33%)	30	1	(χ^2 = 0.22, n.s.)
Firm B	13(38%)	21	-	
Totals	28(35%)	51(64%)	1(1%)	

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly ever
Totals	-	1	4	23(82%)

What was the nature of the business last time?

The most frequently occurring reasons were legal. For the married it was usually to do with housing and for the single interviewees it was usually criminal matters.

Q5 Have you ever been absent from work because you were genuinely sick?

	YES	NO	
Firm A	29(63%)	17	(χ^2 = 2.49, n.s.)
Firm B	27(79%)	7	
Totals	56(70%)	24	

How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	40(71%)	15	1	-

Q6(a) How do you travel to work?

	Car	Motor/ Push Bike	Walk	Bus
Firm A	33(72%)	5(11%)	8	-
Firm B	25(74%)	6(18%)	2	1
Totals	58(73%)	11(15%)	10	1

(If car) Do you participate in a pooling scheme?

	YES	NO	
Firm A	9(27%)	24	(χ^2 = 0.03, n.s.)
Firm B	6(24%)	19	
Totals	15(26%)	43	

Q6(b) (If applicable) Have you ever had transport difficulties in getting to work?

	YES	NO	
Firm A	19(50%)	19	(χ^2 = 1.79, n.s.)
Firm B	11(34%)	21	
Totals	30(43%)	40	

(If yes) Have you ever been absent from work because of these transport difficulties?

	YES	NO
Firm A	8 (42%)	11
Firm B	- (0%)	11
Totals	8 (27%)	22

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	5	2	1	-

What happened last time? In all cases it was either mechanical or electrical problems with the car or motorbike. What was the alternative transport? All said taxi. Why didn't you use it? All mentioned cost.

Q7(a) Do you work 'doubles'/overtime?

	YES	NO	
Firm A	32 (70%)	14	(χ^2 = 3.61, n.s.)
Firm B	29 (85%)	5	
Totals	61 (76%)	19	

(If yes) Have you ever been absent after working a 'double'/overtime?

	YES	NO
Firm A	6 (19%)	26
Firm B	- (0%)	29
Totals	6 (10%)	55

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	4	2	-	-

Q7(b) Have you ever worked a double/overtime, to make up for the pay you lost through absence from work?

	YES	NO
Firm A	9(28%)	23
Firm B	1(3%)	28
Totals	10(16%)	51

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly Ever
Totals	-	-	4	6

Q8 Do you find it requires more effort to attend work on some shifts as opposed to others? (Firm A only)

	YES	NO
Firm A	34(74%)	12

(If yes) Which one?

Night: 19(56%) Day: 13(38%)

Swing: 2(6%) Afternoon: 0

Why?

Night shift: There were a variety of reasons given for the dislike of the night shift. Most respondents mentioned at least two. Eleven respondents cited sleeping problems, the most frequently mentioned. Other reasons included the poor pay and disruption to social life.

Day shift: All thirteen said that they disliked this shift because they had to get up too early, reference being made to how difficult this was in winter and on the weekends, particularly after a 'hard night'. Those living in the rural areas laid particular emphasis on the early start required in order for them to be at work on time.

Afternoon and Swing Shift: No-one had a derogatory remark about the afternoon shift and only two felt the swing shift was the worst, the reason being, in both cases, the irregular hours.

(If appropriate) How about the swing shift?

Of the 44 who were asked, just over half (24) felt that this was the best shift because of the long break (see Appendix A). The remainder of the respondents were fairly noncommital, "It's OK" being a typical response. However, a number mentioned the difficulty of starting work at 11 p.m. on Sunday night after a three day break (see Appendix A).

Q9(a) Do you find it requires more effort to attend work during the weekend? (Firm A only)

	YES	NO
Firm A	18(39%)	28

Why? All eighteen who said "Yes", made references to the disruptive effect shift work had on one's social life. Among those who said "No", frequent reference was made of the "good money" that one could make in the weekend. Moreover it was quite clear that the weekend as such had lost all of its significance for some. It was not uncommon for interviewees to say that they often lost track of what day it was, and as one put it, "One day is the same as the next".

Q9(b) Have you ever been absent from work on a weekend? (Firm A only)

	YES	NO	DK
Firm A	17(37%)	27(59%)	2(4%)

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly Ever
Totals	-	-	11	6

What was the reason for your absence last time?

The reasons for absence, with one exception, centred around social evenings. Quite often, it seemed, the employee was not absent for the event per se. Rather he was absent as a result of it (e.g. tiredness, hang-over).

Q10 Have you ever failed to attend work because you were tired?

	YES	NO
Firm A	8(17%)	38
Firm B	5(15%)	29
Totals	13(16%)	67

(If yes) How often would you say that has happened?

	Hardly ever	Occasionally	Often	Very Often
Totals	9	3	1	-

Why were you tired last time?

Reasons for tiredness varied. Within Firm A over-time and social events were prominent, and within Firm B all of the reasons could be subsumed under one heading, namely social events.

Q11 Is there an attendance bonus scheme here?

	YES	NO	DK	(correct vs incorrect,
Firm A	44(96%)		2	$\chi^2 = 9.3$, $0.01 > p$
Firm B	-	23(68%)	11	> 0.001)

(If yes) Do you think it encourages you to attend work?

	YES	NO
Firm A	8(18%)	36

(If no) Why doesn't it?

Twenty-nine made reference to the small amount of money involved. The remaining seven interviewees said that they would come to work regardless of any attendance bonus scheme.

Q12 Is it easy to 'throw a sicky' around here?

	YES	NO	DK
Firm A	42(91%)	3	1
Firm B	23(68%)	8	3
Totals	65(81%)	11(14%)	4(5%)

How often would you say it is done?

	Not Sure	Very Often	Often	Occasionally	Hardly Ever
Firm A	-	14	13	16	2
Firm B	1	1	5	14	10
Totals	1(1%)	15(20%)	18(24%)	30(39%)	12(16%)

Q13 Have you ever explained your absence from work by saying you were sick when you were not?

	YES	NO	
Firm A	9(20%)	37	($\chi^2 = 1.72$, n.s.)
Firm B	11(32%)	23	
Totals	20(25%)	60(75%)	

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly Ever
Totals	2	-	10	8

What was the true reason for your absence last time?

Although there was a variety of specific reasons given all of them could be broadly classified as being connected with social/leisure activities. Typical of the replies in both organisations were, "I was hung over after a 21st", and "It was Cup Day".

Q14 Have you ever had to produce a medical certificate to verify your absence due to sickness?

	YES	NO	
Firm A	16 (35%)	30	(χ^2 = 2.62, n.s.)
Firm B	18 (53%)	16	
Totals	34 (43%)	46	

(If yes) Have you ever made use of a more lenient doctor for a medical certificate?

	YES	NO
Totals	1	33

A number of interviewees volunteered that they just went to the family doctor they had been going to for years. Others said that they went to the doctor closest to their homes.

Q15 How do you feel about the way absences are handled in this plant? Are they handled:

	Firm A	Firm B	Totals	%
Very fairly	15	2	17	21
Quite fairly	16	13	29	36
Fair in some ways not in others	9	10	19	24
Quite unfairly	2	-	2	3
Very unfairly	3	2	5	6
Not Sure	1	5	6	8
Other	-	2	2	3
	46	34	80	

Why?

In Firm A it was felt that the ease with which one could take a day off made the system fair. On the positive side, the interviewees felt that the abundance of warnings given prior to dismissal for absence and necessity to be absent for three days without notification before dismissal were good points of the system. Interviewees in Firm B tended to be less vocal about the good points of the system. Rather there seemed to be more passive acceptance of it.

Those who felt the system was unfair in some way (33%) were normally very vocal on the point. Favouritism was the main point of contention, a typical reply being, "One guy gets away with murder and another gets a hard time". Other comments implied that the favouritism operating was based on whether one was seen to be a good employee or not. Examples of instances of favouritism were freely given, often with considerable detail. In

one particular case an employee whom others had thought had been the subject of favouritism, volunteered the fact himself. He said that the reason why he "got away with murder" was that he was "doing the boss a few favours".

Q16 Have you ever been scared you would lose your job if you were absent from work?

	YES	NO
Firm A	7(15%)	39
Firm B	1(3%)	33
Totals	8(10%)	72(90%)

(If yes) How often would you say you felt like that?

	Hardly Ever	Occasionally	Often	Very Often
Totals	3	3	1	1

When was the last time you felt like this?

Three said that it was only during the early stages of employment when they did not realise how lenient the employer would be towards absence. Two others made specific reference to times of high unemployment. The remaining three said that they thought they might have lost their jobs as a result of long term but legitimate absence (e.g. hospitalisation, army).

Q17 Have you ever felt that you could afford to be absent as there were plenty of other jobs going?

	YES	NO	DK
Firm A	11(24%)	31	4
Firm B	7(21%)	27	-
Totals	18(23%)	58(73%)	4(4%)

(If yes) How often do you think you have felt like that?

	Hardly Ever	Occasionally	Often	Very Often
Totals	1	4	8	5

When was the last time you felt like this?

To this question the replies were varied and only two specified a time period, during which there were high employment levels.

Q18 Have you ever been on the unemployment benefit?

	YES	NO
Firm A	-	46
Firm B	-	34
Totals	-	80

Q19 Have you ever taken a day off to look for another job?

	YES	NO
Firm A	1(2%)	45
Firm B	2(6%)	32
Totals	3(4%)	77

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	3	-	-	-

When was the last time?

All three said that it was when their present job was 'getting them down'.

Q20 Have you ever taken a day off to go to a sporting fixture, such as the football or races?

	YES	NO
Firm A	7(15%)	39
Firm B	4(12%)	30
Totals	11(14%)	69(86%)

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	11	-	-	-

What was the event last time?

It seemed that days were taken off only for major events, Cup Day at the races being the most frequently mentioned.

Q21 Apart from sports events have you ever taken a day off for any other leisure reasons?

	YES	NO	
Firm A	15(33%)	31	($\chi^2 = 0.32$, n.s.)
Firm B	13(38%)	21	
Totals	28(35%)	52	

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly Ever
Totals	-	-	12	16

What was it you did last time?

The replies to this question were varied but they nearly all tended to be what one could consider as one-off events. In the case of Firm A they were mainly social evenings such as weddings, 21st birthdays etc. These

events were mentioned less frequently in Firm B, where a much more frequent reason for absence was trips over the weekend which required three days off work.

Q22 Have you ever failed to attend work because of a hangover?

	YES	NO	
Firm A	6(13%)	40	(χ^2 = 5.59, 0.02 > p > 0.01)
Firm B	11(32%)	23	
Totals	17(21%)	63	

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	12	4	-	1

Q23(a) Do you find it difficult to attend work after you have had a short break such as, your rostered days off/the weekend?

	YES	NO	
Firm A	20(43%)	26	(χ^2 = 0.05, n.s.)
Firm B	14(41%)	20	
Totals	34(43%)	46(57%)	

Why?

In general it was the "grind", as one put it, of going back to work after having a good time which made attending work difficult.

Q23(b) Have you ever been absent after, your rostered day/s off/the weekend?

	YES	NO	DK
Firm A	27(59%)	11(24%)	8
Firm B	15(44%)	11(32%)	8
Totals	42(53%)	22(28%)	16

How often would you say that has happened?

	Hardly ever	Occasionally	Often	Very Often
Totals	29	11	2	-

Why were you absent last time?

In general the answers were the same as those given to question 21.

Q24 Have you ever been absent from work because the boss was 'getting on your back'?

	YES	NO
Firm A	1(2%)	45
Firm B	1(3%)	33
Totals	2(3%)	78

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly Ever
Totals	-	-	-	2

Q25 Have you ever failed to attend work because you were sick of the job itself?

	YES	NO	DK
Firm A	6(13%)	39	1
Firm B	6(18%)	28	
Totals	12(15%)	67(84%)	1(1%)

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	4	8	-	-

Was there any particular aspect of the job that made you do this last time?

	YES	NO
Totals	4	8

(IF yes) What was it?

This question revealed that there was not any specific aspect of the job that resulted in absence. Rather it was the job as a whole.

Q26 Have you ever failed to attend work because of some undesirable production run?

	YES	NO	D.K.	N.A.
Firm A	1(2%)	43	-	2
Firm B	1(3%)	33	-	-
Totals	2(3%)	76(95%)	-	2

(If yes) How often would you say that has happened?

	Very Often	Often	Occasionally	Hardly ever
Totals	-	-	-	2

Within Firm A a statement was typically qualified as follows: "You don't know what's coming up very often".

Q27 Does your wife work?

	YES	NO		N.A.
Firm A	7(33%)	14	($\chi^2 = 20.42$,	25
Firm B	19(76%)	6	$p < 0.001$)	9
Totals	26(57%)	20		34

(If yes) Have you ever been absent because of this?

	YES	NO
Firm A	-	7
Firm B	-	19
Totals	-	26

Q28 Have you ever been absent from work because of a domestic dispute/argument with a girlfriend?

	YES	NO
Firm A	7(15%)	39
Firm B	5(15%)	29
Totals	12(15%)	68(85%)

(If yes) How often would you say that has happened?

	Hardly Ever	Occasionally	Often	Very Often
Totals	12	-	-	-

Q29 Have you ever felt you could afford to be absent?

	YES	NO	DK	
Firm A	22(48%)	24	-	(χ^2 = 0.12,n.s.)
Firm B	15(44%)	18	1	
Totals	37(46%)	42(53%)	1(1%)	

(If yes) Have you ever been absent because you could afford it?

	YES	NO
Firm A	6(27%)	16
Firm B	6(40%)	9
Totals	12(32%)	25

(If yes) How often would you say that has happened?

	Very often	Often	Occasionally	Hardly Ever
Totals	-	1	7	4

Q30 Have you ever been absent after pay-day?

	YES	NO	DK
Firm A	3(7%)	37(80%)	6
Firm B	-(0%)	32(94%)	2
Totals	3(4%)	69(86%)	8

(If yes) How often would you say that has happened?

	Very often	Often	Occasionally	Hardly ever
Totals	-	-	2	1

Q31 Have you ever been absent from work because you were not 'getting on' with your workmates?

	YES	NO
Firm A	1(2%)	45
Firm B	-(0%)	34
Totals	1(1%)	79

(If yes) How often would you say that has happened?

	Very often	Often	Occasionally	Hardly Ever
Totals	-	-	-	1

CHAPTER 5

DISCUSSION

5.1 ANONYMITY

Before assessing the results of the interview schedule and the W.O.S. one should consider the validity of the answers. In particular questions should be raised concerning the honesty with which interviewees have replied when they have fears concerning the guarantee of anonymity. The method shows that a great deal of care was taken to minimise fears in this respect. In the author's view the measures taken were successful. This conclusion is based on the following findings:

(1) The high response rate - only seven of eight-nine employees approached refused to cooperate.

(2) Only four respondents raised the question of anonymity and in all but one instance fears seemed to be allayed.

(3) Many interviewees spoke freely on personal and sensitive subjects, e.g. domestic dispute and co-worker relationships.

(4) Several interviewees made it quite clear that they did not care who saw their replies.

(5) Where interviewees indicated that they had been absent on relatively few occasions this was checked with absence records and in all cases there was never a major discrepancy.

(6) Whilst interviewing in both firms a very good relationship was established with a number of those who had

been interviewed. Conversations with these people indicated that few if any of those who had been or were about to be interviewed had fears about the author disclosing information to the firm.

(7) The replies to the questions dealing with shift work, weekends, etc. coincided with the objective data, as represented by figures on daily variations.

5.2 TOTAL ABSENCE

In measuring absence within both organisations the assumption was made that the total absence levels provide good indicators of voluntary absence. The first five questions of the interview schedule were an attempt to provide an indication of how valid this assumption was. Although there are many other legitimate reasons why one may be absent apart from those discussed here, e.g. jury service, army training, their effect on overall absence levels was considered to be insignificant.

5.2.1 Accidents (Q1)

As predicted the results show that accidents were not contributing to any significant extent to the overall absence. The accident statistics for both firms confirm this finding with Firm A having only 82 days lost because of accidents for the whole plant during 1976, and Firm B having no lost time accidents at all for the equivalent period.

5.2.2 Funerals (Q2)

Although absences due to funerals are higher than those due to accidents they are rated as relatively rare events and

as such cannot be seen as contributing significantly to absence.

Probably it is quite often the case that only a half-day is required in a number of these cases where the deceased is not from the immediate family. Moreover in Firm A, because of the shift system there is a reasonable chance that such funerals may occur when one is not working. Furthermore, it is possible to swap shifts with another worker so one can attend this type of funeral without losing time. Finally, death among one's immediate family is relatively infrequent. Taking these points into account one would expect a result as found.

5.2.3 Family Sickness (Q3)

Family sickness accounts for even less absence than funerals. This is probably a result of the fact that a personal appearance is required in the case of funerals whereas in most cases of family sickness a number of people can mind the sick member of the family. Moreover, the results indicate that it is probably still the custom in the case of married males for the wife to care for sick children as opposed to the husband and it is only in rare cases, such as serious illness, that the husband takes time off himself. Further support for this view comes from the replies to question 27 which imply that typically wives stop work to look after sick children. It is also probable, in the case of married men, that if there is a mature daughter in the family she may be called upon to look after her mother and/or children in order that the man can work. Similarly with single males it seems likely that females (sisters) are called upon in the first instance.

5.2.4 Business Matters (Q4)

Although 35% said they had been absent from work because of business matters, the majority of them (82%) said that this occurred hardly ever and many of them volunteered that it usually involved an afternoon. Furthermore it was apparent, at least in some cases, that most of the time was spent in going home tidying up and then going to the appointment. This being the case, there would be very little motivation to return home, redress and return to work for what would probably amount to a couple of hours at best.

In Firm B a number of those who said they had never been absent for business reasons volunteered that most of the business they had to conduct usually required an hour or so off and this was usually taken at lunch time or late afternoon. Some of the equivalent group in Firm A said they arranged all their business appointments to coincide with times when they were not working.

To conclude then, the need to be absent for business matters is relatively rare, particularly in Firm A, and where it occurs, it is unusual for it to require more than half a day.

5.2.5 Personal Sickness (Q5)

Of the five 'legitimate' reasons for absence sickness contributes the most to the overall absence levels, 70% of those interviewed indicating that they had been absent at one time or other because they were genuinely sick. Note however that 71% of them said that this occurred hardly ever. In view of the discussion on this matter in the literature review these figures should be viewed with some scepticism,

particularly when one considers that in many cases the judgement of being ill would have been made by the individual himself.

5.2.6 Daily Variations

Further support for the assumption that the total absence figure provides a good indicator of voluntary absence is provided by the graph of the daily variations in Firm A. If legitimate absence was a significant part of the total absence one would not expect the large fluctuations in levels as shown by Fig. 7.

5.2.7 Summary

The weight of the evidence shows that the total absence figure is providing a valid measure of voluntary absence and until some more refinement is possible in measuring and categorising absences it will probably remain the best measure.

5.3 ABSENCE DISTRIBUTIONS

The distributions of the two indices of absence as shown by Figs 1, 2, 3 and 4 are similar to those reported by Arbous and Sichel (1954), Taylor (1967b) and Froggatt (1970b), that is negative binomial. This type of distribution suggests that a few men are responsible for a disproportionate amount of the absence. However, as Taylor (1967b) points out, this does not necessarily mean that 'proneness' is involved. Rather, as he has shown, it quite often reflects the age characteristics of those involved.

5.4 AGE

The results showed that there was no significant difference in age distributions between the firms and the 'old' tend to have less absence (instances and days lost) than the young. In view of the contradictory findings of previous work, particularly those from cross-sectional studies as opposed to longitudinal ones, the present findings need to be treated with caution. Since the approach used here was essentially cross-sectional it should be noted that the result shows a difference in absence between age-groups and this does not necessarily mean that absence rates change with age.

De la Mare and Sergean (1961), Cooper and Payne (1965) and Gadourek (1965) have all suggested that any relationships between age and absence are best explained by reference to differences in attitudes to work which arise because of differences in social and economic experiences (e.g. depressions). Although the evidence is not particularly strong, it is the author's opinion that reference to these factors provides the best explanation for the present finding. During the introduction of the investigation to prospective interviewees it was noticed that the older employees were much more likely to point out that they had never or rarely been absent. A typical comment in this respect was "I've been working here for ten years and I've never had a day off yet". The overall impression gained was that the older employee took a greater pride in his absence record than the younger employee. Further support for this viewpoint comes from the

results of question 11 which dealt with attendance schemes. Six of the seven who said they would come to work regardless of any attendance scheme were all 'old' (i.e. ≥ 29 yrs). These attitudes could be the result of some work ethic by which the older employee is not satisfied, in some sense, until he has completed his forty-hour week. Or, it could be a carry-over effect from times when unemployment was high and no-one dared take a day off through fear of losing his job. Alternatively the results may reflect the changing attitudes to work and leisure which are prevalent today. Another possible explanation could be that the old have greater difficulty obtaining employment and as such cannot afford to risk their present position by being absent too often. Only further research will verify these views.

5.5 LENGTH OF SERVICE

None of the studies reviewed reported an inverse relationship between absence and length of service such as that reported here. In view of the marked skewedness of the length of service distribution (see Fig. 6) the most reasonable explanation for the finding is that length of service is confounded by age, a view that was also expressed by Baumgartel and Sobol (1959), Froggatt (1970a), and Martin (1971). In order to investigate this matter further a 2 x 2 contingency table relating age with length of service was drawn up. The resulting contingency coefficient, C = 0.31, proved to be highly significant (χ^2 = 8.48, 1df, 0.01 > p > 0.001) indicating quite clearly that age and length of service are

closely interrelated in this instance. Thus it seems probable that the present results are the same as those of Froggatt (1970a) and Miller (1974), namely, there is no relationship between length of service and absence.

The other major explanation that has been advanced in the past to explain the relationship between length of service and absence has been the sick pay arrangements (e.g. Martin 1971). However, this can be dismissed in this instance as the results show that the relationship was the reverse to what would be expected. This being the case, it would appear that length of service per se has a minimal effect on absence.

5.6 SICK LEAVE PROVISIONS

The findings reported here are contrary to the conclusion reached in the literature review, namely that absence rates increase with availability of sick pay. Moreover, the results show quite clearly that the relationship between length of service and absence cannot be explained by reference to sick pay provisions.

In view of the findings on age the most likely explanation for the present result would seem to be that those employees who qualify for sick leave tend to be older than those who do not. The possibility of such a relationship was examined by means of a contingency table and the results showed that 62% of those who did qualify for sick pay were old ($\geq$ 29 yrs) and 66% of those who did not qualify for sick pay were young ($\leq$ 28 yrs) a result that was significant ($C = 0.26$, $\chi^2 = 6.08$

1df $0.02 > p > 0.01$). This being the case it seems that the sick leave provisions have little bearing on overall absence rates. This view accords with the findings of Taylor et al. (1972b).

Although the overall absence rates appear not to be influenced by the sick pay arrangements it could be the case that sickness absence levels may increase. The work of Hill and Trist (1955) suggests that the reasons given for absence may change but the overall absence rates may not necessarily do the same. Because of the nature of the absence data in both firms this remains a point of speculation.

In closing it should be noted that not one respondent volunteered that he was manipulating the sick pay arrangements to his advantage.

5.7 ATTENDANCE BONUS SCHEME

Although question 11 was primarily intended for use in Firm A the first part of it was used in both Firms. This showed that the majority of employees knew whether or not there was an attendance bonus scheme in existence, however there was a significant number in Firm B who did not know. Since employees are not told formally of the existence or non-existence of such a scheme in either organisation, it seems quite likely that knowledge of it is gained after an inspection of the first pay packet, which is probably done with the assistance of a co-worker.

Within Firm A the majority (82%) of those interviewed felt that the attendance bonus scheme did not encourage them to attend work, the small sum involved being the main reason given for its lack of motivating power. When one considers that the average bonus for the three shifts which qualify for a bonus is $3.88 (see Appendix C) and average minimum wage (excluding the bonus) for those three shifts is $114.25 (see Appendix I) and that tax will take approximately $1.80 of the bonus, the results are hardly surprising.

In those cases where information about the scheme was volunteered there was a wide disparity in estimates of how much the bonus was worth, with estimates ranging from $2 up to $5. No one who discussed the scheme showed that he had a clear understanding of it. No doubt this is the result of the failure of the Firm to formally explain the scheme.

At best the scheme may only be encouraging people to attend work on time and even here its motivating powers seem limited. If one is late by more than four minutes on any one occasion, for any reason, clause (d), section 4 of the Award (Appendix C) eliminates any motivating power the scheme may have had for the remainder of the shift.

None of the studies reviewed (Grove 1968, Lawler and Hackman 1969, Pedalino and Gamboa 1974) are directly comparable to this one. However, the present results emphasise the conclusions reached in the review, namely, there is a need to consider attendance schemes which have been in operation for some time, employees' understanding of such schemes, the motivating power of the sums of money involved, and the regulations regarding forfeiture of one's bonus.

5.8 ABSENCE ADMINISTRATION

The results to question 12 showed that it was a relatively easy matter to 'throw a sicky', particularly in Firm A. In this case quite often it was not necessary to resort to this tactic, a number of respondents mentioning that all that was required was prior notification, a typical statement being, "As long as you tell them they aren't worried". Moreover as one respondent pointed out, "It's dead easy. You don't even have to talk to the boss". This probably accounts for the relatively low number who said they had resorted to this tactic, as revealed in the results of question 13.

The percentage of interviewees in Firm B who felt it was an easy matter to throw a sicky was lower than that in Firm A, a finding one would expect in view of its lower overall absence levels. However, the percentage who said they had resorted to this tactic (Q13) was higher than in Firm A, suggesting that the need for an explanation was greater.

In view of these findings it is hardly surprising that the ease with which one could take a day off was given as the reason why many felt the absence administration in Firm A was fair (Q15). Favouritism was the most frequent reason given by those who felt the system was unfair. Judging by the examples given this would certainly seem to be the case.

The ease with which one can be absent as well as the perceived fairness of the absence administration are obviously both related to absence levels. As far as the author is aware these are areas of investigation which have not received attention in the past. In view of the present findings it

seems that they may be a useful avenue of inquiry.

5.9 MEDICAL CERTIFICATES

The belief that some doctors give medical certificates more freely than others is a point of concern to employers. Some believe that these doctors are actively sought out by employees. The results of this investigation (Q14) fail to support this view, only one interviewee admitting he had sought out a lenient doctor. Rather, it seemed that the normal practice was to consult the family doctor or the doctor closest to one's home. However, the results suggest that there is some substance in the belief that some doctors do give medical certificates more readily than others as the following statement illustrates. "The doctor just asked me if I wanted time off work." The extent of this lenient approach remains a point for speculation.

Arising out of this area of questioning were two further points. One, there is confusion in a number of minds as to when a medical certificate is required. Secondly, there were instances where a certificate was theoretically required but it was never asked for. Both points seem worthy of further investigation.

Once again, the present findings are not comparable with other research as it appears there has not been any.

5.10 OVERTIME

The opportunities for working overtime in Firm A are directly dependent on the absence behaviour of its employees. The union and/or company require minimum numbers to man machinery for each shift. Thus the absence of one person results in 8 hrs overtime for another, and this commonly is referred to as a "double". The prior notification given to a potential overtime worker is dependent on that given by the employee intending to be absent. The selection of who should be offered overtime is dependent on the supervisor who must take into account the experience of the employee, recent absence etc. It is normal procedure to offer overtime to the older hands in the first instance. To a large extent then overtime cannot be relied upon as additional income.

The overtime in Firm B is offered on a regular basis and at the time of interviewing it was one hour each morning with the occasional Saturday morning.

In both firms, as a rule, overtime is not offered to those employees who have recently been absent and who have failed to provide adequate explanations. However, occasionally there are exceptions, particularly when production levels are high. There are no guidelines in this respect in either firm, it being left entirely to the discretion of the supervisors.

The results show that in Firm A there is an inverse relationship between absence and overtime, a finding which agrees with that of Mason (1962) and Ryder (1969). This finding suggests that the policy of not offering overtime to people with high absence is enforced. Although there was no

relationship between over time and absence in Firm B this does not suggest that the same policy is not enforced in Firm B. In this case it seems likely that the regular nature of over-time is confounding the issue, a point which was raised in the review.

It was suggested by Firm A that apart from financial considerations overtime may be related to absence as a result of tiredness, for in their particular case most overtime involved an extra eight hours. An examination of the manning analysis in Department C for the period 1/1/76 - 1/8/76 showed that there were 543 doubles worked, 439 of which were followed by a working day, and there were only ten instances of absence. The results from answers to questions 7 and 10 confirm this. Moreover it appeared that where absence occurred after a double, it was usually the first time an employee had worked in this fashion and he had slept in.

Finally, it seems that the instances of working overtime to make up for lost pay due to absence are relatively rare.

As the review suggested, and these findings have shown, overtime absence relationships need to be interpreted within the context of the organisation, particular attention being paid to the manner in which they are administered.

5.11 FINANCIAL STATUS

A commonly expressed view is that absence is directly related to how much uncommitted income one has. Implicit in the investigations of the relationship between marital status and absence has been the assumption that marital status

provides an indicator of how much uncommitted income an employee has. It is assumed that the single employee has more uncommitted income than his married counterpart.

5.11.1 Marital Status/Family Responsibility

The comparison of married versus single employees' absence levels revealed a result the same as that found by Naylor and Vincent (1959), Gadourek (1965) and Martin (1971), namely, there was no significant differences in absence between the two groups. There was still no significant difference when the married employees were recategorised according to whether they had dependents or not. This result disagrees with the findings of Naylor and Vincent (1959) and Isambert-Jamati (1962), who both found a positive relationship between absence rates and the number of dependents.

5.11.2 Wife's Occupation

In line with those assumptions concerning marital status some employers believe that a second income, being brought into the home by the wife, predisposes the husband to taking the odd day off. This belief is held in spite of any empirical evidence. The results comparing the absence rates of males whose wives work with that of males whose wives do not work are in conflict with this view. It seems likely that where the wife does work it is to assist in some planned way with the finances and in these situations it seems unlikely that the male will fall back on his wife's wage unless it is necessary.

The results of question 29 show that the interviewees were equally divided on whether they considered they could afford to be absent or not. Moreover, it is apparent that financial reasons rarely are the prime reason for absence, however it is unlikely that they do not figure at all in the decision to be absent.

Investigations of the relationships between absence, marital status and working wives seem to be extremely limited when one considers the factors which could be confounding such relationships. Clearly what is needed is a sensitive measure of financial status before anything conclusive can be said.

5.12 TRANSPORT TO WORK

The results of question 6(a) show that the majority of employees have their own personalised means of transport. The car figures prominently, with 73% of all the employees using this as their means of transport. In some cases employees had a second personal alternative of getting to work, such as push bike or motor cycle. These findings are not surprising in the case of Firm A when one considers that it is virtually a necessity to have one's own transport because of the hours of work.

Within Firm A there were nine interviewees participating in three car pools and in Firm B six in two. Pooling arrangements are limited in Firm A for one can only enter such arrangements with those from the same crew. Furthermore, the irregular nature of the overtime and the desire by some and

not others to work does not favour pooling arrangements. These complications aside, comments from interviewees in both Firms would suggest that it is the desire for independence of movement which above all else is the determining factor.

The results of question 6(b) show that 43% of the interviewees have had transport difficulties in getting to work but this rarely led to absences. This is probably because many have at least one alternative means of transport. In a number of cases individuals went to considerable lengths to get to work. One interviewee said that he hitched twenty-two miles for four consecutive days whilst his car was being repaired. On the other hand there were those who did not make much effort; "I try clutch starting the bike as far as the corner and if it won't start I go back to bed". Comments such as this were in the minority however.

All of the absence because of transport difficulties occurred in Firm A. When one considers that Firm B is centrally located, its interviewees are on day work and all are urban dwellers, whereas Firm A is on the outskirts of the city, operates a rotational shift system, and has nine of the interviewees who live in rural areas, the results come as no surprise. If one is an employee of Department K in Firm B and has transport problems one could probably resort to public transport. However, this is not an alternative in Firm A if one is on the night shift and/or a rural or distant urban dweller. In these circumstances the only alternative may be a taxi and as the results indicate this is often not a very attractive economic proposition. This is particularly so when considerable time has been lost in attempts to start a car and

when there is a possibility of further time lost whilst subsequently waiting for a taxi. This coupled with the inevitable frustration and concern about when the car is going to be repaired and the loss of the attendance bonus make attendance at work seem unimportant at the time.

The relationship between aspects of the journey to work and absence is very complex. This investigation has shown that attention must not only be paid to distance from work (Liddell 1954, Gadourek 1965, Martin 1971), time taken to get to work (Garland 1936, Knox 1961, Taylor 1968) and the means of transport (Isambert-Jamati 1962; Taylor 1968), but also to other factors such as hours of work, the availability of alternative transport, etc.

5.13 W.O.S.

5.13.1 Overall Results

In accordance with the findings of Nicholson (1976) the results of this investigation show that job satisfaction and absence are not related. Before accepting this conclusion it is necessary to consider a number of alternative explanations for the results.

First, the validity of the attitude measure might be considered. As described earlier there are many direct and indirect indications which encouraged prior confidence in the W.O.S. and none which gave reasons to doubt its validity or reliability. However, there could have been confusion on the part of the interviewees in understanding some of the questions. The detailed attention that was given to the

administering of the W.O.S., as described earlier, ensured that where this became obvious it was rectified. In spite of this, the number of occasions on which this had to be done suggested that confusion might have been more widespread than was obvious. In spite of Cross's (1973) efforts the present investigation highlighted problems in all but one of the scales.

The first scale to occur on the questionnaire (see Appendix G) is "the firm as a whole". The statements "A poor firm to work for" and "Has a good reputation" frequently required explanation. The similarity of some of the statements under "Pay" was frequently commented on. The subtle distinctions quite often had to be pointed out. Some statements were interpreted out of their contexts and this was particularly true of "Easy to get on", with respondents forgetting to relate this specifically to "Promotion". The statements "endless" and "worthwhile" in the "Job Itself" scale frequently required elaboration. There were relatively few queries concerning the statements on the "Supervisor" scale. Finally the relevance of "stupid" was often questioned. To conclude, it seems reasonable to suggest that confusion regarding statements may account for the result.

Second, fears concerning anonymity could have resulted in false responses. Previous discussion shows that this is unlikely to have been the case.

Third, the failure of the absence measures to be related to satisfaction might lead one to question the suitability of the FI and LTI measures. This explanation seems

unlikely as their effectiveness has been empirically demonstrated (Chadwick Jones et al. 1971).

Finally, the absence-satisfaction relationship is confounded by other variables. This explanation seems to be the most reasonable. It could be the case for instance that an employee is highly dissatisfied with his employment yet has never taken a day off because he is saving up to buy a house, car, yacht, etc. Alternatively he may be highly satisfied because of the flexible arrangements which permit him to take the odd day off. Whatever the actual explanation, it is clear that consideration must be given to situational and personal variables when examining the relationship between absence and job satisfaction.

There were a number of questions in the interview schedule which related to some of the scales on the W.O.S., in particular - The Job Itself, Supervision and Co-workers.

5.13.2 The Job Itself

Firm A suggested that some characteristics of the job itself could be influencing absence. These would include in particular, long production runs, products which required close inspection, and products with high fault rates. The results of question 25 suggest that the job itself rarely figures as a causal factor in absence and when it does it is rarely a specific aspect of the job but rather the job as a whole. In view of these results the replies to question 26 come as no surprise. Although the typical reply within Firm A, namely "You don't know what's coming up very often", is true

it is equally the case that there are times when employees do know what jobs they will be on as some lines last for days. An interesting point is that during the pretesting in Department H of Firm A at least four interviewees made comments similar to the following: "No - but I bet the guys in Department C have [been absent because of production runs]". Within Firm B the production changes are not as noticeable, at least to the outsider, but even so respondents still felt there were good and bad runs.

The lack of any association between the WOS job itself subscore and absence is in accordance with the foregoing. Apart from the reasons already advanced, this lack of association could be the result of an acceptance by many of the status quo. Such an acceptance is typified by the not uncommon statements, "It's a job" and, "It's OK".

It could be that various aspects of the job itself influence absence in more subtle ways. That is to say the job itself may rarely be the main reason for absence but may play a role in helping the potential absentee to make up his mind whether to attend work or not in a situation such as the one where his car will not start.

5.13.3 Supervision

The W.O.S. supervision subscore failed to show any relationship with absence. Moreover, the replies to question 24 showed that only two interviewees had been absent because the boss had been getting on their back. Together these results would suggest that supervision and absence are not closely related. However, such a conclusion needs to be treated with caution.

Confounding the WOS subscore could be the fear that the supervisor may find out what the employee thinks of him and thus he rates him favourably. The markedly skewed distribution of the supervisor subscore as shown by Fig. 8 (see Appendix J), could be interpreted as support for this view. Alternatively, of course, it could be interpreted as high satisfaction with supervision.

Although only two reponsdents had admitted to being absent because of interpersonal problems with the supervisor the occasional remark such as, "It happens though", would suggest that this factor could be contributing to absence more than the results would suggest. This being the case it seems quite likely that the results could be partially attributable to pride, that is, some interviewees are too proud to admit that the situation had got the better of them. However, it could be equally argued that an employee would not take a day off because of interpersonal problems because this could be taken, in some sense, as a sign of defeat, particularly in those situations where his co-workers were familiar with the circumstances.

Finally, it could be the case, as with the job itself, that supervision is affecting absence in much more subtle ways, such as in the administering of absence policies.

5.13.4 Co-workers

The distribution of the subscores from the WOS (see Fig. 9, Appendix K) show that the majority of employees seem to be satisfied with their co-workers. The results of question 31 are hardly surprising in view of the failure to show any significant relationship between the WOS subscore and absence.

It would appear that when problems with interpersonal relationships with one's co-workers occur, as undoubtedly they do from time to time, they rarely result in employees being absent. At worst the individuals probably just avoid one another. It should be borne in mind though that there is a certain degree of reluctance attached to talking about one's workmates in a derogatory manner. Moreover, it could be the case that an employee was absent from work because of some interpersonal problem with his work mates but pride would not allow him to admit it. Taking these factors into account it still seems that the overall results would not be significantly affected.

5.14 SHIFT WORK - FIRM A

The replies to question eight showed that night shift was the most unpopular shift. Apart from sleeping problems, poor pay and disruption to one's social life were seen as undesirable aspects of night shift. Appendix I shows quite clearly that the night shift has the lowest rate per hour worked. Figure 7 shows that the highest absence of any day is Saturday of the night shift.

Quite significant was the high number who felt the early start (7.00 am) was the most undesirable aspect of day work. The emphasis placed on this point by those living in rural areas is understandable when one considers that the average distance they had to travel was eight miles (n = 8).

The swing shift was considered by some to be the best because of the long break. Reference to the shift roster (Appendix A) shows that one effectively gets three days off, namely, Friday, Saturday and Sunday. Note also that two of these days are the conventional weekly break. The difficulty of starting work at 11.00 pm on Sunday night was mentioned and this is clearly reflected in absence levels as shown by Fig. 7. One possible reason for the reluctance to start could be that one receives double time for the first hour only, the remainder of the work being on Monday. Much more likely however is simply that it is difficult to go back to work after a three day break, particularly if one starts on a night shift. The results of question 23(a) provide support for this view.

The most surprising finding and the most difficult to explain is that no-one said that they disliked the afternoon shift. Possible reasons could be the late start and the fact that one can still socialise on Saturday night and recover on Sunday.

One of the disadvantages of some shift work is that one works when others are relaxing, in particular during the weekend, a point that has already been made. Examination of Fig. 7 shows that in general absence levels peak on or near

the Saturday and Sunday for all four shifts. In spite of this, only 39% of those interviewed felt that it required more effort to attend work on the weekend (Q9). Moreover only seventeen, (37%), said they had been absent during weekends. All seventeen mentioned social reasons for their absences.

Since it seemed unlikely that only seventeen interviewees had accounted for the weekend levels as displayed by Fig. 7 the manning analysis sheets were re-examined. The re-examination revealed that 35 of the 46 interviewed had been absent during a weekend. In view of the previous discussions concerning anonymity this discrepancy can probably be attributable to difficulty in remembering rather than a deliberate attempt to mislead. It could be that it is easy to remember reasons for absence, particularly on being prompted, but it is relatively difficult to remember the day a particular absence occurred, especially when one feels disorientated with respect to the day of week by the shift work. Evidence for this disorientation is provided in the results to question 9.

One exception to the high absence levels on or around weekends in Firm A was the Sunday afternoon shift (see Fig. 7) which had the second lowest absence overall. A possible explanation for this finding is that one receives double time for the entire day and it is the most preferred shift. However, the high absence on the Sunday of the day shift appears to conflict with the view that pay may be an incentive. It could be the case though that the absence in this instance is a result of the early start required after what quite often could have been a 'hard' night.

To date there has been only one study (Taylor 1967a) which has examined the daily variations in absence levels among shift workers on a 24 hr a day seven day a week operation. Taylor found that the number of absences starting on a Friday was significantly higher than any other day of the week, a result which provides partial support for the present findings.

5.15 PAY DAY

The effect of pay day on the absence behaviour of those interviewed in Firm A is quite marked, with the pay days exhibiting some of the lowest levels of absence, a finding which conflicts with the two studies reviewed by Behrend (1959) (see Fig. 7 and results of question 30). In fact the day with the lowest absence is a Wednesday of the swing shift. This is an afternoon shift (see Appendix A), the least disliked of the shifts. Unfortunately no equivalent statistics were available for Firm B and so the effects are not clear.

The view that absence is high following pay day is one which is often expressed, even though there does not appear to be any empirical evidence to support it. The graph of the daily variations in Firm A (Fig. 7) shows that in the three cases where pay day is followed by a working day absence levels are below average. The results of question 30 also lead one to question the basis of this view although one cannot be sure of the results in the case of Firm B in view of what has already been said about remembering what days one was absent.

5.16 FURTHER DAILY VARIATIONS - FIRM A

Although the literature on daily variations in absence behaviour is far from conclusive the weight of the evidence (Taylor 1967a, Martin 1971, N.Z. Department of Labour 1975) suggests that for those working a normal week, absence is greatest on Monday, that is the first day after the weekend break. Question 23, which was aimed at examining this matter, supports these findings. Thirty-four (43%) of the respondents said that they found it difficult to attend work the day after a break such as the weekend or rostered day/s off (RDO), whichever was the case, and just over half said that they had been absent on such an occasion. The fact that many found work a "grind" and that one day's absence allowed a three day break, in most of these cases, were the main reasons given for absence.

However, an examination of the daily variations in Firm A shows that these conclusions should be treated with caution (see Fig. 7). The effects of pay day clearly overrule those of the RDO on the day shift. The RDO effects are quite marked however in the case of the afternoon shift where Friday exhibits the highest overall absence level. The night shift figures show relatively low absence on Tuesday following the RDO, a result that is surprising in view of the fact that night shift is the most disliked. One possible explanation may be that pay day had occurred seven days earlier. The low absence level on the Monday of the swing shift is difficult to explain, particularly when one considers it is day work and this requires the undesirable early start. Absence levels on the swing shift are at the highest on Sunday, the day following the two RDO's. These results show that a consideration of some of the not so obvious causes of daily variations is necessary

if one intends to provide a full explanation.

5.17 LEISURE

5.17.1 Sporting Fixtures (Q20)

Absence because of sporting fixtures appears to be relatively rare and where it does occur it seems to be confined to the major events such as Cup Day at the horse racing, or a rugby test. Moreover, even though absence levels on the day are high their contribution to the overall absence would seem to be small. In the case of Firm B this is probably because the majority of major events fall in the weekend. In most instances one knows well in advance when these events will be occurring and in Firm A it is a relatively easy matter to swap shifts with someone so that one can attend a fixture. Moreover the inability to be a participant in any regular sporting activity such as rugby, whilst employed in department C might dampen the enthusiasm of some to attend sporting fixtures.

5.17.2 Other Leisure (Q21)

Thirty-five percent said that they had been absent for leisure reasons other than sporting fixtures, however these instances were relatively rare. Within Firm A it was quite clear that absence occurred during the weekend and in Firm B the absence occurred either side of the weekend.

5.17.3 Hangovers (Q22)

In spite of the sensitive nature of this question seventeen (21%) freely admitted that they had failed to come to work because they were hungover. In both Firms this was quite often a result of a party, wedding or other social event. In Firm A there were some indications that some employees had a few beers before going to work on the night shift, particularly on Friday and Saturday and occasionally this had got out of hand and resulted in absence. Most drinking is done on or around the weekend and this is illustrated in the significant difference between the Firms on this question.

In spite of the fact that sixty-three interviewees said that they had never been absent from work because of a hangover, it was made quite clear by some that they had attended work in a "pretty sorry state".

The findings here, and earlier, emphasise the need for investigators to examine the effect of leisure activities on absence, variables that appeared to have been ignored in the past.

5.18 DOMESTIC DISPUTES

In the early stages of investigations in Firm A senior personnel had expressed the view that some employees were absent because of marital or girlfriend problems, many of which, it was felt, were a direct result of shift work. Question 28 was an attempt to investigate the matter. The results suggest that the number of absences attributable to domestic disputes or arguments with girlfriends is relatively

small in both firms. Indeed these problems may encourage attendance, work being seen as a legitimate escape from the undesirable situation. As one respondent put it, "I come to work to get away from her". Furthermore, the fact that both firms have the same percentages of those absent because of these problems would suggest that shift work is not a significant contributing factor in these situations. However, the results should be treated with caution for this is a sensitive area and it does seem probable that there would have been personnel who said "no" rather than discuss their problems. There may also be an element of pride operating as well. In spite of these points though some of the interviewees were surprisingly frank.

5.19 ECONOMIC CLIMATE

The results of question 16 show that the majority of employees have never feared dismissal because of absence. There are a number of factors which account for this result, all of which are directly or indirectly related to employment levels:

(1) The high labour turnover in department C of Firm A and the resultant problems in recruiting and training new employees means that only those with high absence rates will be dismissed.

(2) Scarcity of machine mechanics in Firm B and the resulting feelings of job security.

(3) In Firm A at least seventeen employees viewed the job as temporary. This was either made explicit by statements

such as, "I'm just passing through", or alternatively it was evident from discussions of former and future employment (student, freezing worker).

(4) No-one in either firm had been on the unemployment benefit (Q18).

The implicit assumption here is that absence levels in general reflect the interviewee's perception of his prospects of alternative employment. There may be exceptions where this may not be the case. It has already been pointed out that some interviewees, particularly older ones, may have rarely been absent because of some principle they held. However, in view of some of the alternative explanations for the age-absence relationship this exception is open to question.

The replies to question 17 suggest that the relationship between employment levels and ones absence behaviour is subtle, the majority of employees indicating that they do not consciously consider employment levels. The results are difficult to explain. It appears that those interviewed have never consciously considered unemployment levels in relation to their absence behaviour. Of course this is not to say they never will for it seems likely that the majority may never have experienced difficulty in obtaining employment. This seems quite likely in view of the age structure of those interviewed and the fact that none of them has been on the unemployment benefit (Q18). Moreover, it was quite clear that some employees were very aware of the indicators of high employment (e.g. labour turnover). Only markedly different

economic circumstances will reveal whether these factors are influencing absence behaviour. Unfortunately the present findings are not directly comparable to any of those reviewed.

5.20 SEEKING ALTERNATIVE EMPLOYMENT

A senior official in Firm A suggested that the seeking of alternative employment often results in absence. The results of question 19 suggest otherwise. In both firms respondents volunteered that one does not need to take a day off to do this. At worst a few hours only are lost, unless of course the employment interview is out of town, which is probably a relatively rare occurrence.

5.21 FIRM A vs FIRM B

The results have shown a significant difference in absence levels between the two firms. There are a number of possible explanations for this finding. However, in view of the foregoing discussion the most reasonable explanation would seem to be the difference in the hours of work.

Aamonsen (1964), Taylor (1967a) and Taylor et al. (1972a) have all shown that permanent shift workers tend to have less absence than permanent day workers. The results of this investigation indicate the reverse. Significantly more employees in Firm A than in Firm B had what were considered high absence levels. Moreover, the percent lost time index of absence in Firm A was larger than that for Firm B. A finding such as this has not been reported in the literature.

The explanation for the present finding seems relatively simple. One's social life is obviously affected by shift work and it has been demonstrated that a consideration of social as opposed to person or work variables, provides the key to understanding a large amount of absence behaviour.

5.22 METHODOLOGY

The methods used in a study such as this are constrained very largely by the characteristics of the cooperating organisation, and as such it becomes rather an academic matter to discuss detailed methodological alternatives for future investigations. This is particularly the case when it is considered that the investigator has an obligation, in some sense, to attempt to provide the organisation with some useful data.

5.22.1 W.O.S.

It has already been suggested that confusion with statements on the WOS was probably greater than had been expected. This situation arose as a direct result of the small numbers used for pretesting, the reasons for which have already been given. Had the numbers during pretesting been larger it seems highly likely that the confusion would have been detected earlier and it may have been possible to remedy the situation. Although it had occurred to the author that the reliability of the answers could have been tested by repeating the questions after a lapse of time it was felt that such a check would have encouraged suspicions. It was the author's opinion that such suspicions could have jeopardised the

investigation proper which was to take place in an adjacent department. The only other alternative would have been to approach another organisation in order to carry out the reliability tests and this was considered impractical in the time available.

5.22.2 Interview Schedule

One of the original aims of the study was to confine the investigation to one organisation and preferrably one sub-population within that organisation. For a variety of reasons, already referred to, this was not achieved. This was unfortunate for a number of reasons, particularly in respect to the interview schedule, for it had been 'tailor made' for Firm A. As a result of this there were a number of areas of questioning which were not relevant to Firm B. Perhaps even more important though, was the fact that the author had less chance to get some feeling for the absence culture in Firm B which could have come about as a result of pretesting. Both of these problems could have been avoided if the schedule had been redeveloped for Firm B, but practical considerations such as time and sufficient numbers for pretesting ruled this out.

Although the author felt he had a better appreciation of the absence culture in Firm A, as a result of the development and pretesting of the interview schedule in that Firm, subsequent interviewing indicated that even more pretesting would have been desirable, further areas of inquiry suggesting themselves as the interviews proper progressed. In particular the problems of social integration for the shift worker, absence administration, and attitudes to absence were worthy of more detailed consideration.

In most instances the method of questioning was direct. There were indications that it may have been advantageous in some areas of questioning (e.g. co-workers, supervision) to have used indirect or even projective measures.

CHAPTER 6

CONCLUSIONS

The results presented in this thesis are based on two departments in two firms. As such they cannot be considered to be representative of all male blue collar workers. Indeed this was never necessarily intended. The results then can be taken as applicable only to the two sub-populations from which they were obtained. Even here it should be borne in mind that they have not been validated. Without further similar studies inferences should be treated with caution. Moreover it should be borne in mind that the investigation was largely exploratory.

However, the investigation has shown that absence cannot be explained by simple causal relationships. Many variables listed as causal ones in the literature rarely deserve this status. The reason for an instance of absence is rarely single. Not only are there multiple factors operating in subtle ways, but their effects cannot readily be isolated, interactions quite often occurring. This being the case variables must often be looked upon as mediating or intervening factors.

The powerful nature of the contextual variables has been demonstrated. Not only are they playing a role themselves, but they also appear to provide the key to understanding the manner in which person and work variables may be affecting absence. It is the author's view that such variables deserve more attention than they have received in the past and that

it has been demonstrated that the only effective way to do this is to conduct multi-variate analyses of a situation.

Although it was not the aim of this study to test any of the theories it is the author's opinion that none of those advanced earlier provides adequate explanations for the findings of this study. Detailed though Gibson's (1966) views are they are very broad, and in general place no emphasis on specific areas, such as social variables. Hill and Trist (1955) considered the absentee to be a 'stayer'. However, the relationship shown between length of service and absence and the high labour turnover in Firm A do not support this view. Finally, As's (1962) views are suspect in view of the tenuous nature of any satisfaction-absence relationship.

For the pragmatic manager there are a number of points worthy of consideration. It would be an undeniable advantage to be able to identify, at the time of his employment, the potential bad attender. The results of this inquiry have limited application in this respect since there were relatively few personal characteristics which were related to absence and only one, age, showed some potential as a predictor. Since age can be identified before employment it would seem worthwhile to investigate the reliability and utility of it as a predictor. Some absence could also be avoided before it starts by checking the prospective employee's absence patterns with former employers.

Pre-employment predictors are of little value in times of high employment. In these situations employers have often

turned to preventative measures. One of the most common absence control programmes, the attendance bonus scheme, seems to be of doubtful value in curbing absence in Firm A. The withholding of overtime on the other hand may be worthy of closer consideration although such a practice is of limited value in times of high production when few of the more desirable employees may wish to work overtime. Indications are that a far greater impact on absence levels can be made by serious attention to absence policies and procedures and the communication of these to employees through induction session. Moreover, serious consideration should be given to any favouritism that may be operating in the administering of absence.

So far all the measures suggested have been aimed at the effects rather than the cause. This investigation has shown that contextual factors, in particular social variables, play a significant role in absence. For the most part many of these are difficult for the manager to deal with. However, it seems that there are times when actual time lost and the disruption to production can be kept to a minimum. In some situations it is not all that difficult to make provisions for particular events. Some employees may well be absent anyway irrespective of warnings etc. The adoption of flexible working hours seems to be one practical approach. Production lost could be made up by working a few hours at the start and/or end of a day and disruption could be kept to a minimum as one would have advance warnings of intended absence. The present findings also suggest that where relevant, a

modification of the monetary incentives of the various shifts (rates per hour worked) may be worthwhile in view of the differences between them in terms of disruption to one's social life. These suggestions serve only as examples and it is appreciated that the implementation of them is not as simple as at first sight it may appear to be, particularly in view of the problems that may be encountered with unions. However, they do show that it may be possible for the employer to influence the manner in which these contextual variables operate on absence.

Finally, it should be realised that absence is not necessarily completely dysfunctional. For the absentee, it might often be psychologically rewarding to take a day off and this could have some benefits when he returns to work. How the employer might view these benefits in view of the associated costs, is open to debate.

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APPENDIX A

SHIFT ROSTER - FIRM A

	MON.	TUE.	WED.	THUR.	FRI.	SAT.	SUN.	PAY HOUR
DAY	11 pm-7 am	OFF	7 am-3 pm	7 am-3 pm	7 am-3 pm	7 am-3 pm	7 am-3 pm	62½
AFTER-NOON	3 pm-11 pm	3 pm-11 pm	OFF	OFF	3 pm-11 pm	3 pm-11 pm	3 pm-11 pm	54½
NIGHT	OFF	11 pm-7 am	11 pm-7 am	11 pm-7 am	11 pm-7 am	11 pm-7 am	OFF	46½
SWING	7 am-3 pm	7 am-3 pm	3 pm-11 pm	3 pm-11 pm	OFF	OFF	11 pm-7 am	48

APPENDIX B

PERSONNEL PROCEDURE ON ABSENTEEISM - FIRM A

PERSONNEL PROCEDURE

(No. 1.)

ABSENTEEISM

This procedure covers absenteeism for non-salaried employees.

ABSENCES

Employees are expected to have a bona fide reason for all absences.

Employees are also required to give the company prior notification of their intended absence for a day or shift. By agreement with the Union the employee should notify his supervisor or the Security Officer on duty at the gatehouse, at least two hours prior to the start of his intended absence.

Prior notification is an important requirement, particularly in the case of shift workers where shift reliefs must be arranged.

There will be a few instances where there is a valid reason why the employee could not notify correctly. In these instances supervisors should obtain some corroboratory evidence to support the unnotified absence.

ABSENTEE OFFENDERS

Each supervisor is expected to monitor and control absenteeism in his section or area. When an employee returns to work after having an unapproved or unnotified absence on the previous day or shift, the supervisor should:

(a) Question the employee in private as to why he had an unapproved or unnotified absence the previous day - if no valid reason can be established for the unapproved or unnotified absence, then:

(b) The employee should be officially warned that (i) he is required to notify two hours prior to the commencement of the absence and that (ii) for any absence whether notified or not, the employee must have a bona fide reason. He should then be told further offences could lead to a written warning.

(c) If the same employee repeats the offence within a month (perusal of back copies of the weekly attendance record will help in establishing this point) then the employee should be given a written warning. This warning should state that "the company is not satisfied with the employee's attendance record and that a further similar offence could result in the employee's dismissal". This warning should be in duplicate (one copy to be held by the company in a safe place - one copy to be given to the employee).

(d) Should the same employee repeat this offence within a three month period, then he should be given one week's notice for unsatisfactory performance.

APPENDIX C

SECTIONS OF AWARD - FIRM A

SICK LEAVE

22 (a) After 12 months' continuous service with the same employer an employee shall be entitled in the second and in each subsequent year of service to paid sick leave for up to five (5) days - that is, 40 hours calculated at his hourly or weekly rate of pay.

(b) Sick leave entitlements which remain unused at the end of each year of service shall be carried forward to the next year of service, provided that at no time the total entitlement exceeds thirty-five (35) days.

(c) Such payment shall not be made in respect of any statutory or agreement holiday for which the employee is entitled to full pay.

(d) Sick leave payment shall be calculated on a pro rata basis.

(e) Absence of one day may be paid provided that the employer may require the worker to produce a medical certificate.

(f) Where practicable the employee shall ensure that notice of absence is given to the employer prior to the commencement of work on the day on which he will be absent. At the same time the employee shall advise the employer of the reason for, and likely duration of, the absence.

(g) A claim for sick leave in excess of one day shall be supported by a medical certificate.

(h) The employer shall have the right to require the employee to produce additionally a medical certificate at the employer's expense from a doctor named by the employer.

(i) An employee's sick leave entitlement shall commence to accumulate from 11 May 1973 or from the date of the completion of his first 12 months' continuous employment, whichever is the later date.

(j) The provisions of this clause shall not apply where a worker is receiving payment under the provisions of the Accident Compensation Act 1972.

(k) After the first five (5) days of sickness, an employee may, where he so requests, be allowed further paid sick leave up to the maximum accumulated by that employee.

BEREAVEMENT LEAVE

23 (a) An employee, other than a temporary or casual employee, may be granted up to three (3) days' paid leave at ordinary rates of pay on the death in New Zealand of his parent, spouse, child, brother or sister.

(b) For the purpose of this clause, the words "wife" and "husband" shall not include a wife or husband from whom the employee is separated, but shall include a person who lives with the employee as a de facto wife or husband.

(c) This applies only when the employee actually attends the funeral or has to make certain arrangements associated with the death, or a combination of both.

(d) Proof of such death shall be furnished by the employee to the satisfaction of his company/plant manager.

ABSENTEEISM

27 Where an employee absents himself from work for a continuous period of three (3) days without the consent of the employer, and without notification to the employer, he shall be deemed to have terminated his employment. He shall, however, retain his right of appeal under the personal grievance clause of the Industrial Relations Act 1973.

ATTENDANCE BONUS

4 (a) A shift worker rostered to work the afternoon shift and who is on duty on each of the days Monday, Tuesday, Friday, Saturday, and Sunday from 3 p.m. to 11 p.m. shall be paid an attendance bonus of $3.75.

(b) A shift worker rostered to work the night shift and who is on duty on each of the days Tuesday, Wednesday, Thursday, Friday and Saturday from 11 p.m. to 7 a.m. shall be paid an attendance bonus of $4.15.

(c) A shift worker rostered to work the relieving shift and who is on duty on each of the days Wednesday and Thursday from 3 p.m. to 11 p.m. and on each of the days Sunday and Monday from 11 p.m. to 7 a.m. shall be paid an attendance bonus of $3.75.

(d) Absence from any shift for any cause whatsoever releases the company of the obligation to pay, excepting where a worker is absent for health reasons supported by a medical certificate when he shall receive one-fifth of the bonus for each day worked.

APPENDIX D

INDUCTION INFORMATION ON ABSENCE - FIRM A

N E W E M P L O Y E E S

Below is the Company Telephone Number for your information should you need to inform the Company of an absence.

Phone No.

During Day Shift hours the Sorting Supervisor can be contacted Weekends and Night Shift the Security Officer will pass on your message.

PLEASE UNDERSTAND THAT YOU ARE REQUIRED TO ADVISE AT LEAST 2 HOURS PRIOR TO THE START OF YOUR SHIFT.

PERSONNEL MANAGER

APPENDIX E

COMMUNICATION ON MANNING ANALYSIS RECORDS - FIRM A

WEEKLY ATTENDANCE - MANNING ANALYSIS RECORDS

UNPAID ABSENCES

A. To enable us to obtain more accurate absentee statistics, would people responsible for filling in these sheets please use the key given at the bottom of the sheet.

Where an unpaid absence occurs please mark in the appropriate 'Notes and Comments' column whether the absence is APPROVED or NOT APPROVED.

NOTE:

1) An APPROVED absence is one for which a bona fide reason has been established.
2) Even though an absence has been correctly notified, it will not become an APPROVED absence until you are satisfied a bona fide reason has been established.
3) This approach applies to half and part day absences as well as for full day absences.

B. Where the 'Notes and Comments' column is empty, we will treat the absence as NOT APPROVED and this will affect your absentee statistics.

This also shows the importance of hours being shown rather than just ticks.

C. Your copy of the weekly attendance record should become the key document for the control of absenteeism in your area. You should therefore keep these in a safe place for reference purposes.

Personnel Manager

APPENDIX F

INTERVIEW SCHEDULE

Date:

Name:

Age:

Marital Status: Married/Single/Divorced/Separated

Dependents (No. + Age):

Residence (Suburb):

Shift Crew:

Length of Service:

Job Title:

Previous Employment:

1. Have you ever been absent from work because of a work related accident?

   YES NO

   How many times?

2. Have you ever been absent so you could attend a funeral?

   YES NO

   (If yes) How often would you say that has happened?

   VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

   How many times?

3. Have you ever been absent from work because of family sickness?

   YES NO

   (If yes) How often would you say that has happened?

   HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

   How many times?

   Who was sick last time?

4. Have you ever been absent from work so you could attend to important business matters? (e.g. Lawyer, etc.)?

YES NO

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

What was the nature of the business last time? (e.g. legal)

5. Have you ever been absent from work because you were genuinely sick?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

6(a) How do you travel to work?

(If car) Do you participate in a pooling scheme?

YES NO

(If yes) How many are in it?

6(b) (If applicable) Have you ever had transport difficulties in getting to work?

YES NO

(If yes) Have you ever been absent from work because of these transport difficulties?

YES NO

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

What happened last time?

What was the alternative transport?

Why didn't you use it?

7(a) Do you work 'doubles'/overtime?

YES NO

(If yes) Have you ever been absent after working a 'double'/overtime?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

Why were you absent last time?

7(b) Have you ever worked a 'double'/overtime to make up for the pay you lost through absence from work?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

8. Do you find it requires more effort to attend work on some shifts as opposed to others?

YES NO NOT SURE

(If yes) Which one?

Why?

(If appropriate) How about the swing shift?

9(a) Do you find it requires more effort to attend work during the weekend?

YES NO NOT SURE

Why?

9(b) Have you ever been absent from work on a weekend?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

What was the reason for your absence last time?

10. Have you ever failed to attend work because you were tired?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

Why were you tired last time?

11. Is there an attendance bonus scheme here?

YES NO DON'T KNOW

(If yes) Do you think it encourages you to attend work?

YES NO DON'T KNOW

(If no) Why doesn't it?

12. Is it easy to 'throw a sicky' around here?

YES NO DON'T KNOW

How often would you say it is done?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

13. Have you ever explained your absence from work by saying you were sick when you were not?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

What was the true reason for your absence last time?

14. Have you ever had to produce a medical certificate to verify your absence due to sickness?

YES NO DON'T KNOW

(If yes) Have you ever made use of a more lenient doctor for a medical certificate?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

15. How do you feel about the way absences are handled in this plant; are they handled:

VERY FAIRLY

QUITE FAIRLY

FAIR IN SOME WAYS, NOT IN OTHERS

QUITE UNFAIRLY

VERY UNFAIRLY

NOT SURE

OTHER

Why?

16. Have you ever been scared you would lose your job if you were absent from work?

YES NO DON'T KNOW

(If yes) How often would you say you felt like that?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

When was the last time you felt like this?

17. Have you ever felt that you could afford to be absent as there were plenty of other jobs going?

YES NO DON'T KNOW

(If yes) How often do you think that you have felt like that?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

When was the last time you felt like this?

18. Have you ever been on the unemployment benefit?

YES NO

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

19. Have you ever taken a day off to look for another job?

YES NO

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

When was the last time?

20. Have you ever taken a day off to go to a sporting fixture?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

What was the event last time?

21. Apart from sports events, have you ever taken a day off for any other leisure reasons?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

What was it you did last time?

22. Have you ever failed to attend work because of a hangover?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

23(a) Do you find it difficult to attend work after you have had a short break such as, your rostered day/s off/the weekend?

YES NO

Why?

(b) Have you ever been absent after your rostered day/s off/ the weekend?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

Why were you absent last time?

24. Have you ever been absent from work because your boss was 'getting on your back'?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

25. Have you ever failed to attend work because you were sick of the job itself?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

Was there any particular aspect of the job that made you do this last time?

YES NO DON'T KNOW

(If yes) What was it?

26. Have you ever failed to attend work because of some undesirable production run?

YES NO DON'T KNOW N.A.

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

What was the run last time?

27. Does your wife work?

YES NO N.A.

(If yes) Have you ever been absent because of this?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

What was the reason last time?

28. Have you ever been absent from work because of a domestic dispute/argument with a girlfriend?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

HARDLY EVER OCCASIONALLY OFTEN VERY OFTEN

How many times?

29. Have you ever felt that you could afford to be absent?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

30. Have you ever been absent after pay-day?

YES NO DON'T KNOW

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

Why were you absent the last time?

31. Have you ever been absent from work because you weren't 'getting on' with your workmates?

YES NO

(If yes) How often would you say that has happened?

VERY OFTEN OFTEN OCCASIONALLY HARDLY EVER

How many times?

32. Have you been absent from work for any other reasons than those that have been mentioned?

YES NO

(If yes) What was it?

33. Is there anything further you would like to add?

APPENDIX G

JOB SATISFACTION QUESTIONNAIRE

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WORKER OPINION SURVEY

I would like to have your views on aspects of your employment: on the firm as a whole, your pay, your opportunities for promotion, the work you do, your immediate superior, and your workmates. For each of these areas I have listed a number of statements. Please read each statement in turn and think if it applies to the area in question. If it does, then place a tick (√) in the 'YES' column. If it does not apply then place a tick in the 'NO' column. If you are not sure whether the statement applies or not then place a tick in the 'NOT SURE' column.

There are no right or wrong answers and this is not a test of your intelligence or ability. I am interested only in *your opinions*. I wish to emphasize that your views will be treated as strictly confidential and that no one in this Company will see your questionnaire.

Thank you for your co-operation.

1. The firm as a whole	YES	NO	NOT SURE
Looks after its employees			
A poor firm to work for			
They treat you like a number			
Has a good reputation			
Too much class distinction			
Feel you belong			
Needs some fresh people at the top			
The best firm I have worked for			
2. Pay	YES	NO	NOT SURE
Underpaid for what I do			
Adequate for my needs			
Far too low			
Quite highly paid			
Fairly satisfactory			
Poor			
Well paid			
Less than I deserve			
3. Opportunities for promotion	YES	NO	NOT SURE
The system of promotion is fair			
Prospects very limited			
Easy to get on			
Too much favouritism			
Good opportunities			
My experience increases my prospects			
Dead-end job			
The good jobs are usually taken before you hear of them			

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4. The job itself	YES	NO	NOT SURE
It's the same day after day			
The wrong sort of job for me			
Worthwhile			
Routine			
Time passes quickly			
Satisfying			
Better than other jobs I've had			
Endless			
5. Your immediate superior	YES	NO	NOT SURE
Lets you know where you stand			
Does a good job			
Interferes too much			
Always too busy to see you			
Stands up for you			
Quick tempered			
Can discuss problems with him			
Hard to please			
6. The people you work with	YES	NO	NOT SURE
Easy to make enemies			
Hard working			
Some of them think they run the place			
Know their jobs			
Work well as a group			
Stupid			
Unpleasant			
Do their share of the work			

APPENDIX H

SECTIONS OF AWARD - FIRM B

ABANDONMENT OF EMPLOYMENT

15. Where an employee absents himself from work for a continuous period exceeding five days without the consent of the employer or without notification to the employer, or without good cause, he shall be deemed to have terminated his employment without notice.

(NOTE - The expression "good cause" denotes cause as serious as, for example, unexpected hospitalisation.)

SICK PAY

21(a) After 12 months' continuous service with the same employer a worker shall be entitled in each subsequent year of service to sick pay for up to five days calculated at the rate of his ordinary pay. Sick pay shall accumulate up to a maximum of 30 days by carrying forward from one year to the next any unused sick pay of up to 25 days.

(b) Sick pay shall not be paid in respect of any statutory or award holiday for which the worker is entitled to full pay.

(c) The daily rate for sick pay shall be calculated according to the number of working days for which the worker's ordinary weekly pay is paid.

(d) The employer may require a claim for sick pay to be supported by a medical certificate.

(e) The worker shall where practicable ensure notice is given to the employer on the first day of absence due to illness.

(f) The employer shall also have the right to require the worker to produce additionally a medical certificate at the employer's expense from a doctor nominated by the employer.

BEREAVEMENT LEAVE

22. On completion of six month's continuous service with the same employer, a worker shall subject to satisfactory proof being produced, be allowed bereavement leave of up to three days on ordinary pay on the death in New Zealand of the worker's spouse, child, parent, brother or sister.

APPENDIX I

MINIMUM PAY - FIRM A

	Shift			
	Day	Afternoon	Night	Swing
Actual hours worked	48	40	40	40
Hours payed	62.5	54.5	46.5	48
*Basic Pay	130.69	113.96	97.23	100.37
Shift Allowance	4.08(6)	3.40(5)	3.40(5)	3.40(5)
Cost Living Allowance	7.00	7.00	7.00	7.00
Attendance Bonus	-	3.75	4.15	4.15
Total	141.77	128.11	111.78	114.92
Rate per hours worked	2.95	3.20	2.79	2.87

* The basic pay is the minimum gross pay of an employee of department C who has been with the firm for one month.

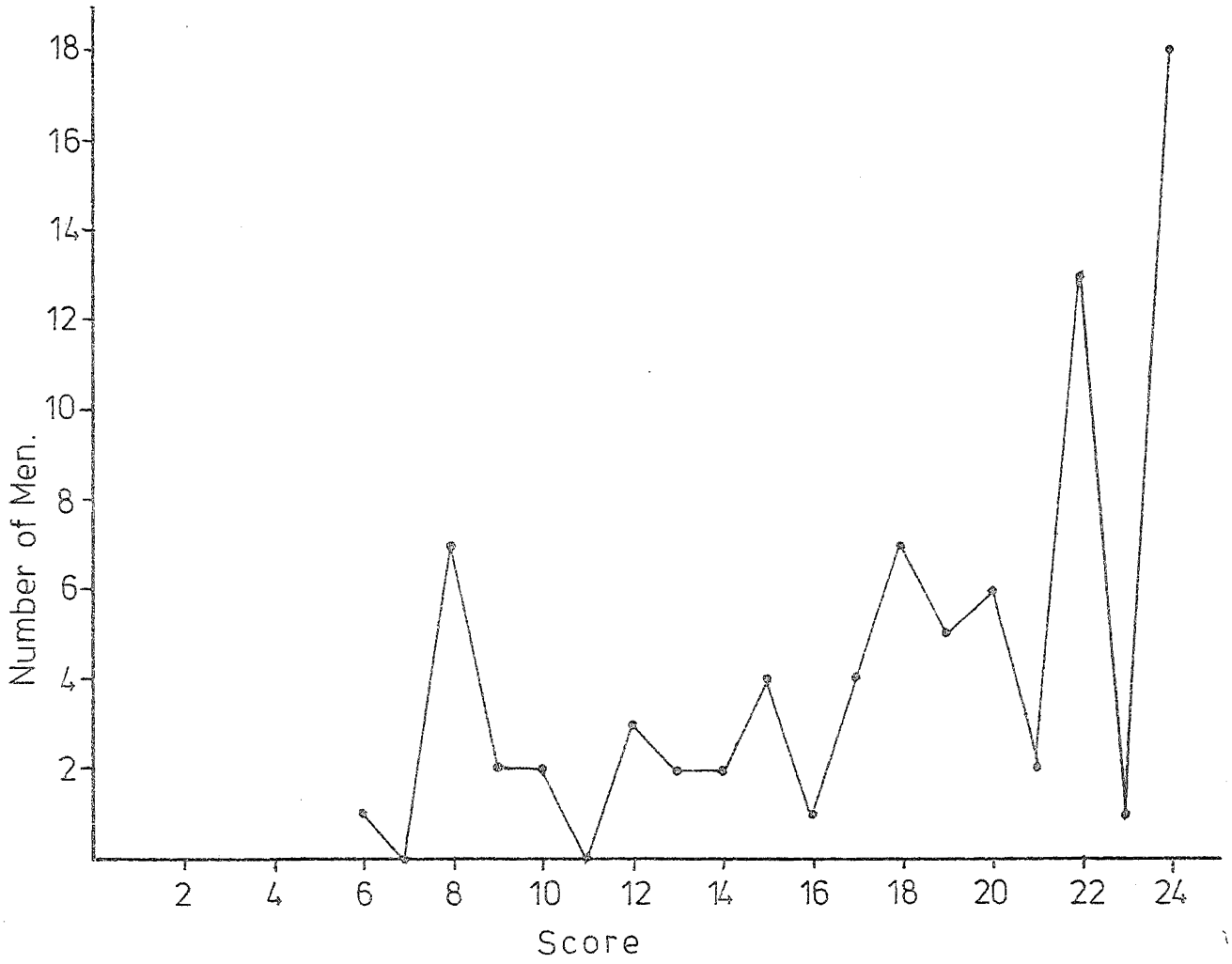

FIG. 8 Distribution of WOS Superior Subscore Firms A + B

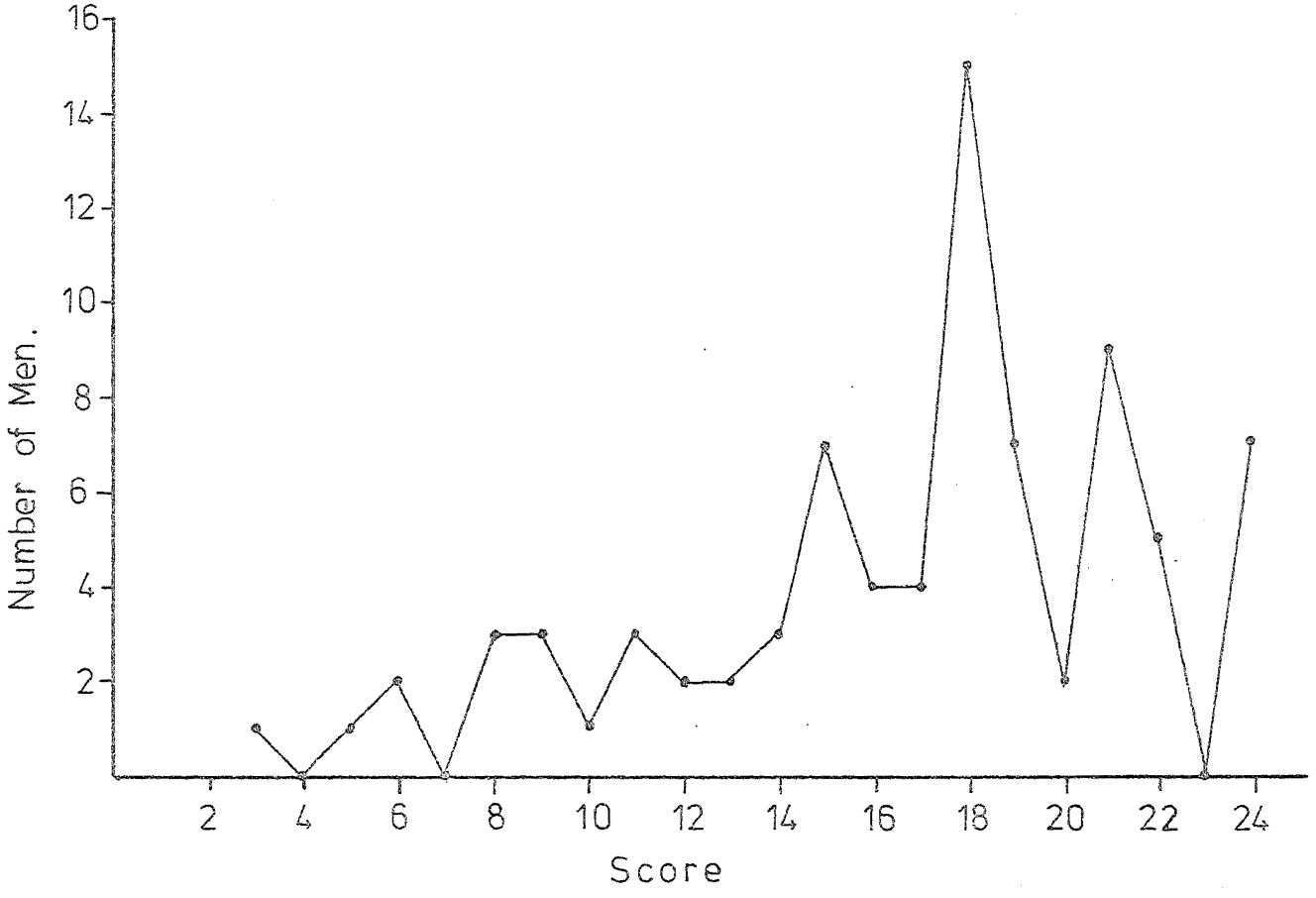

FIG. 9 Distribution of WOS Co-worker Subscores Firms A+B